PHYSICS ABSTRACTS

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ERRATA, 1949

Abstr. 5077, line 2: *for* ARYES, H. *read* AYRES, H.

Abstr. 5633, line 1: *for* "Stepping" *read* "Stopping."

Abstr. 5964, 6183, 6188, 6428, 6433, 6442, journal reference: for *April* 15 read *March* 15.

Abstr. 6988, line 11: *for* BaTiOJ *read* $BaTiO_3$.

Author Index, p. 921: R. H. DAVIES. Insert R. M. DAVIES as author of entry for Abstr. 4194 and cross-reference.

ERRATA, 1950

Page 498, column 2, line 33: *for Abstr.* 4547 *read Abstr.* 4577.

Abstr. 737, line 2: *for* F. KAEMPFER *read* K. KAEMPFFER.

Abstr. 906, line 3: *for* **20** *read* **26**.

Abstr. 1012, line 2: *for* A. SUGIMITO *read* A. SUGIMOTO.

Abstr. 1027, line 2: *for* A. I. ALIKHANIAN *read* A. I. ALIKHANYAN.

line 3: *for* M. I. DEĬON *read* M. I. DAĬON.

Abstr. 1053, line 3: *for* T. N. CHARKHCHYAN *read* T. N. CHARAKHCHYAN.

Abstr. 1061, line 3: *for* S. NIKOLSKY *read* S. NIKOLSKIĬ.

line 4: *for* V. TSIRLIN *read* V. TSYRLIN.

Abstr. 1167, lines 5 and 6: *for* Abstr. 3921 (1949) *read* Abstr. 3921 (1948).

Abstr. 1267, line 3: *for* "261" *read* "251".

Abstr. 1373, line 3: *for* G. E. BIELOVITSKY and L. V. SUCHOV *read* G. E. BELOVITSKIĬ and L. V. SUKHOV.

Abstr. 1698, line 2: *for* P. VINCENT *read* P. VIMONT.

Abstr. 1721, line 2: *for* E. G. BURGE *read* E. J. BURGE.

Abstr. 1752, line 4: *for* $BrTiO_3$ *read* $BaTiO_3$.

Abstr. 1806, line 2: *for* R. C. HAWKINS *read* C. R. HAWKINGS.

Abstr. 1843, line 3: *for* Y. YAMAMUCHI *read* Y. YAMAGUCHI.

Abstr. 1854, line 3: *for* JANEAU, L. *read* JAUNEAU, L.

Abstr. 1874, line 5: *for* Y. S. SCHUUR *read* YA. S. SHUR.

Abstr. 1876, line 4: *for* Y. S. SCHUUR *read* YA. S. SHUR.

Abstr. 1880, line 2: *for* E. BURGE *read* E. J. BURGE.

Abstr. 2217, line 2: *for* M. G. VIGUIER *read* G. VIGUIER.

Abstr. 2457, line 3: *for* T. Z. FISHER *read* I. Z. FISHER.

Abstr. 2542, line 3: *for* S. I. VERNOV *read* S. N. VERNOV.

Abstr. 2582, line 3: *for* YA. S. SCHUR *read* YA. S. SHUR.

Abstr. 2647, line 10: *for* "element 61" *read* "$_{61}$Pm"; line 13 for "Pr" *read* "Pm".

Abstr. 2880, line 5: *for* solar *read* atmospheric.

Abstr. 2986, line 2: *for* L. D. ROSENBERG *read* L. D. ROZENBERG.

Abstr. 3076, line 3: *for* (*Jan.*, 1949) *read* (*Jan.*, 1950).

Abstr. 3191, line 1: *for* **Reactive** *read* **Reactive [radiative]**.

Abstr. 3273, line 2: *for* N. Z. MIRIAZOV *read* N. Z. MIRYASOV.

Abstr. 3369, line 3: D. G. BALIGINSKI *read* D. G. BULYGINSKI.

Abstr. 3383, line 2: *insert* B. L. FUNSHTEIN as second author.

Abstr. 3516: *For correct reference see* Abstr. 4485 *and erratum thereto below.*

Abstr. 3542, line 3: *for* (*No.* 1) *read* (*No.* 2).

Abstr. 3598, line 3: *for* S. F. RADIONOV *read* S. F. RODIONOV.

Abstr. 3625, line 5: *for* Abstr. 2106 *read* Abstr. 2102.

Abstr. 3688, lines 6, 15, 17 and 20: *for* ω read w.

Abstr. 4305, line 2: *for* H. C. PRICE *read* H. C. PRICE, JR.

Abstr. 4459, line 3: *for* (*Feb.*, 1950) *read* (*Jan.*, 1950).

Abstr. 4477, line 2: *for* (*No.* 3) *read* (*No.* 2).

Abstr. 4481, line 4: *for* (*No.* 3) *read* (*No.* 2).

Abstr. 4482, line 3: *for* (*No.* 3) *read* (*No.* 2).

Abstr. 4483, line 2: *for* (*No.* 3) *read* (*No.* 2).

Abstr. 4485, line 3: *for* (*No.* 3) *read* (*No.* 2).

Abstr. 4490, line 2: *for* (*No.* 3) *read* (*No.* 2).

Abstr. 4496, line 3: *after* **3** *insert* (*No.* 2).

Abstr. 4805, 4915, 4953, 4976, 4990, 5366, 6150, journal reference: for *Proc. Phys. Soc., Lond. A* read *Proc. Phys. Soc., Lond. B.*

Abstr. 4878, line 3: *for* (*Dec.*, 1949) *read* (*Sept.*, 1949).

line 5: *for* H.F. *read* HF.

Abstr. 4904, line 16: *for* "Be_2 crystals" *read* "a Be crystal".

Abstr. 4952, line 8: *for* "Ti and H" *read* "Ti and O".

Abstr. 5025, line 2: *for* E. SCHOPPERT *read* E. SCHOPPER.

Abstr. 5128, line 3: *for* E. J. KONDORSKI *read* E. J. KONDORSKIĬ.

Abstr. 5645, line 3: *for* T. MORTENSON *read* T. MORTENSEN.

Abstr. 5910, line 4: *for* "the above" *read* Abstr. 5908 (1950).

Abstr. 5911, line 2: *for* H. KAWAMURO *read* H. KAWAMURA.

Abstr. 5994, line 3: *for* H. SCHUELER *read* H. SCHÜLER.

Abstr. 7027, 7109, 7920, 8046, 8486, journal reference: *for* (1950) *read* (1949).

Abstr. 7917, line 2: *for* M. DUFFIEUX *read* P. M. DUFFIEUX.

Abstr. 8183, line 3: *delete* 69 *and after journal reference insert* "See Abstr. 6706 (1950) of which the title should read **Measurement of a $1{\cdot}6 \times 10^{-9}$ second half-life in Yb^{170}.**"

Abstr. 8338, line 2: *for* M. SULLIVAN *read* B. M. SULLIVAN.

SUPPLEMENT TO LIST OF JOURNALS

The list on pp. 1–14 was published in January (1950) and the list below gives the additions and alterations made since that date. The addresses given are believed to be correct, but no responsibility can be accepted for errors. Journals marked * are not received regularly.

Abh. Braunschw. Wiss. Gesell.	*Abhandlungen der Braunschweigischen Wissenschaftlichen Gesellschaft.* Geysostrasse 7, Brunswick.
Abh. Dtsch. Akad. Wiss. Berlin, Math.-nat. Kl.	*Abhandlungen der Deutschen Akademie der Wissenschaften zu Berlin. Mathematisch-naturwissenschaftliche Klasse.* Unter den Linden 9, Berlin, N.W.7.
An. Inst. Ing. Chile	*Anales del Instituto de Ingenieros de Chile.* Santiago.
**Analyst*	*Analyst.* W. Heffer and Sons Ltd., Cambridge.
Ann. Acad. Sci. Fennicae, Ser. A I.	*Annales Academiae Scientiarum Fennicae, Series A I. Mathematica-Physica.* Helsinki.
Ann. Acad. Sci. Fennicae, Ser. A II.	*Annales Academiae Scientiarum Fennicae, Series A II. Chemica.* Helsinki.
**Ann. Comput. Lab. Harv. Univ.*	*Annals of the Computational Laboratory, Harvard University.* [Abstracted by *Index Aeronauticus.*]
**Ann. Géophys.*	*Annales de Géophysique.* 165 Rue de Sèvres, Paris (XV^e^).
Ann. Inst. Fourier.	*Annales de l'Institut Fourier.* [Suite des *Annales de l'Université de Grenoble, Section des Sciences Mathématiques et Physiques.*] Institut Fourier, Grenoble.
Ann. Inst. Poincaré	*Annales de l'Institut Henri Poincaré.* 11 Rue Pierre-Curie, Paris (V^e^).
Ann. Proc. Ass. Sci. Tech. Soc. S. Africa	*Annual Proceedings of the Associated Scientific and Technical Societies of South Africa.* Kelvin House, Johannesburg.
**Arch. Math.*	*Archiv der Mathematik.* [Abstracted by *Mathematical Reviews.*]
Astron.	Formerly *Astr.* This contraction will henceforward be used for the word "*Astronomical.*"
Astron. J.	*Astronomical Journal.* Yale University Observatory, New Haven 11, Connecticut. [Change of address.]
Aust. J. Sci.	*Australian Journal of Science.* Science House, 157 Gloucester Street, Sydney.
Automat. Elect. Tech. J.	*Automatic Electric Technical Journal.* 1033 West Van Buren Street, Chicago 7, Illinois.
B.C.U.R.A. Bull.	*Monthly Bulletin of the British Coal Utilisation Research Association.* 13 Grosvenor Gardens, London, S.W.1.
Bergens Museums Årb.	*Bergens Museums Årbok.* [Now *Univ. Bergen, Årb.*]
**Blast Furn.*	*Blast Furnace.* [Abstracted by Metropolitan-Vickers Electrical Co.]
**Bol. Radiactividad.*	*Boletin de Radiactividad.* Ríos Rosas 9, Madrid.
Brennstoff-Wärme-Kraft [*BWK*]	*BWK. Brennstoff-Wärme-Kraft.* Deutscher Ingenieur-Verlag, Prinz-Georg-Strasse 77, Düsseldorf.
Brit. Elect. Lab. Mem.	*British Electricity Laboratories Memoir.* British Electricity Authority Research Laboratories, Randall's Farm Lane, Kingston Road, Leatherhead.
Brüel and Kjær Tech. Rev.	*Brüel and Kjær Technical Review.* Nærum, Denmark.
**Bull. Amer. Soc. Test. Mater.*	*Bulletin of the American Society for Testing Materials.* [Abstracted by Metropolitan-Vickers Electrical Co.]
Bull. Soc. Roy. Sci. Liége.	*Bulletin de la Société Royale des Sciences de Liége.* [Abstracted by *Photographic Abstracts.*]
**Bull. Soc. Vaud. Sci. Nat.*	*Bulletin da la Société Vaudoise des Sciences Naturelles.* F. Rouge & Cie, Librairie de l'Université, Lausanne.
Bull. Tech. Univ. Istanbul.	*Bulletin of the Technical University of Istanbul.* [See under *Istanbul Teknik Universitesi Bülteni.*]
C.R. Acad. Polonaise Sci. Lett. Cl. Sci. Math. Nat.	*Comptes Rendus Mensuels des Séances de la Classe des Sciences Mathématiques et Naturelles de l'Académie Polonaise des Sciences et des Lettres.* Cracow.
**C.R. Soc. Sci. Lett. Varsovie, Cl. III. Sci. Math. Phys.*	*Comptes Rendus de la Société des Sciences et des Lettres de Varsovie, Classe III des Sciences Mathématiques et Physiques.* Warsaw.
**Canad. Stand.*	*Canadian Standards.* National Research Building, Ottawa.
Cath. Press	*Cathode Press.* Machlett Laboratories, Springdale, Connecticut.
Chem. Engng News	*Chemical and Engineering News.* The American Chemical Society, 20th and Northampton Streets, Easton, Pennsylvania.
Ciencia, México	*Ciencia.* Apartado Postal 21033, México, D.F.
Circ. Univ. Ill. Engng Exp. Sta.	*Circulars of the University of Illinois Engineering Experiment Station.* University of Illinois, Urbana, Illinois.
**Concr. Constr. Engng*	*Concrete and Construction Engineering.* [Abstracted by *Railway Engineering Abstracts.*]
**Contr. Crimean Astrophys. Obs.*	*Contributions of the Crimean Astrophysical Observatory.* [Abstracted by the *Astronomical News Letter.*]
**Diesel Rly Tract.*	*Diesel Railway Traction.* [Abstracted by Metropolitan-Vickers Electrical Co.]
Diss. E.T.H., Zürich	*Dissertation der Eidgenössischen Technischen Hochschule in Zürich.* Clausiusstrasse 13, Zürich.
Elect. Engr Merch.	*Electrical Engineer and Merchandiser.* Tait Publishing Co. Pty., Melbourne.
Elect. Mfr.	*The Electrical Manufacturer.* Morley House, 26–30 Holborn Viaduct, E.C.1.

Elekt. Bahnen	*Elektrische Bahnen.* R. Oldenbourg, Schliessfach 31, Munich 1.
Elektrizitätsverwertung	*Elektrizitätsverwertung—L'Electrique—Electrical Service.* Elektrowirtschaft, Bahnhofplatz 9, Zürich 23.
Elektrotechnik, Prague.	*Elektrotechnik.* Vocelova 3, Prague XII.
Elektrotechniker	*Der Elektrotechniker.* VDE-Verlag, Briller Strasse 99, Wuppertal-Elberfeld.
Elin-Z.	*Elin-Zeitschrift.* Volksgartenstrasse 1–5, Vienna 1/1.
Fortschr. Radiotech.	*Fortschritte der Radiotechnik. Archiv für radiotechnische Neuerungen.* [Continuation of *Handbuch der Funktechnik* and *Fortschritte der Funktechnik.*] Franksche Verlagshandlung, Pfizerstr. 5–7, Stuttgart.
Fourth Wld Pwr Conf. Paper (Lond., 1950)	*Papers read before the Fourth World Power Conference, London*, 1950. British National Committee, World Power Conference, 201–2 Grand Buildings, Trafalgar Square, London, W.C.2.
**Gaz. Mat., Bucuresti*	*Gazeta Matematica, Bucuresti.* [Abstracted by *Mathematical Reviews.*]
**Geophys. Mem. Met. Off.*	*Geophysical Memoirs of the Meteorological Office.* H.M. Stationery Office, Kingsway, London, W.C.2.
Geophysics	1138 East Thirty-Seventh Street. (Mailing address: Box 7248) Tulsa 18, Oklahoma. [Change of address.]
Glasers Ann.	*Glasers Annalen.* Georg Siemens Verlagsbuchhandlung, Nollendorfstr. 28, Berlin W. 30.
Guide Russ. Sci. Period. Lit., Brookhaven	*Guide to Russian Scientific Periodical Literature.* Information and Publications Division, Brookhaven National Laboratory, Upton, Long Island, New York.
Harv. Coll. Obs. Center Anal. Mass. Inst. Techn. Tech. Rep.	*Harvard College Observatory and Center of Analysis of Massachusetts Institute of Technology Technical Report.* Cambridge, Massachusetts.
**India Rubb. World*	*India Rubber World.* [Abstracted by the Research Association of British Rubber Manufacturers.]
Indian J. Met. Geophys.	*Indian Journal of Meteorology and Geophysics.* India Meteorological Department, Lodi Road, New Delhi.
Instn Elect. Engrs, Paper	*Institution of Electrical Engineers Paper.* Savoy Place, London, W.C.2. [To be published in *Proceedings* or other Institution publication; reference thereto given on publication. Proofs usually available.]
**Iron Age*	*Iron Age.* [Abstracted by Metropolitan-Vickers Electrical Co.]
**Iron Coal Tr. Rev.*	*Iron and Coal Trades Review.* [Abstracted by Metropolitan-Vickers Electrical Co.]
Istanbul Tek. Üniv. Bül.	*Istanbul Teknik Üniversitesi Bülteni.* [*Bulletin of the Technical University of Istanbul.*] Yazi Heyeti Sekreterliğine, Gümüşsuyu, Istanbul.
Istanbul Üniv. Fen Fak. Mec., Ser. A.	*Istanbul Üniversitesi Fen Fakultesi Mecmuasi* [*Revue de la Faculté des Sciences de l'Université d'Istanbul*]. Seri A. Matematik-Fizik-Kimya. Büyük Reşit Paşa caddesi, Beyazit-Istanbul.
Istanbul Üniv. Obs. Yaz.	*Istanbul Üniversite Observatuari Yazilari* (Publications of the Istanbul University Observatory.) Istanbul.
J. Atmos. Terr. Phys.	*Journal of Atmospheric and Terrestrial Physics.* Butterworth Scientific Publications, 436 Strand, W.C.2; Academic Press Inc., 125 East 23rd Street, New York.
J. Coll. Sci.	*Journal of Colloid Science.* Academic Press, 125 East 23rd Street, New York 10, New York.
**J. Fac. Sci. Tokyo Univ.*	*Journal of the Faculty of Science.* University of Tokyo.
J. Franklin Inst.	*Journal of the Franklin Institute.* 20th and The Parkway, Philadelphia 3, Philadelphia. [Correction to entry in main list.]
**J. Math. Pures Appl.*	*Journal de Mathématiques Pures et Appliquées.* [Abstracted by *Mathematical Reviews.*]
J. Mech. Lab., Tokyo	*Journal of the Mechanical Laboratory.* Government Mechanical Laboratory, Agency of Industrial Science and Technology, Tokyo.
**J. Polymer Sci.*	*Journal of Polymer Science.* [Abstracted by the Research Association of British Rubber Manufacturers.]
J. Roy. Tech. Coll., Glasgow.	*Journal of the Royal Technical College, Glasgow.* Glasgow.
**J. Soc. Chem. Ind., Lond.*	*Journal of the Society of Chemical Industry.* 56 Victoria Street, London, S.W.1.
J. Soc. Mot. Pict. Televis. Engrs	*Journal of the Society of Motion Picture and Television Engineers.* [Formerly *Journal of the Society of Motion Picture Engineers.*]
**J. Tech. Ass. Malaya*	*Journal of the Technical Association of Malaya.* Post Box 664, Singapore.
K. Tekn. Högsk. Handl.	*Kungl. Tekniska Högskolans Handlingar.* [*Transactions of the Royal Institute of Technology.*] Stockholm.
**Kolloid Z.*	*Kolloid Zeitschrift.* [Abstracted by the Research Association of British Rubber Manufacturers.]
**Kolloid. Zh.*	*Kolloidnyi Zhurnal.* [Abstracted by *British Rheologists' Club Bulletin.*]
L.S.E. Engng Bull.	*L.S.E. Engineering Bulletin.* Laurence, Scott and Electromotors Ltd., Manfield House, Southampton Street, Strand, London, W.C.2.
Licht-technik	*Licht-technik.* Helios-Verlag G.m.b.H., Berlin-Borsigwalde.
**Machinery, Lond.*	*Machinery.* [Abstracted by Metropolitan-Vickers Electrical Co.]
**Mag. Concr. Res.*	*Magazine of Concrete Research.* Cement and Concrete Association, 52 Grosvenor Gardens, S.W.1.
Marconi Rev.	*Marconi Review.* Marconi Wireless Telegraph Company, Electra House, Victoria Embankment, London, W.C.2.
Marelli	*Marelli.* Ercole Marelli, Corso Venezia 16, Milan.

**Mech. World*	*Mechanical World.* [Abstracted by Metropolitan-Vickers Electrical Co.]
Mém. Acad. Polonaise Sci. Lett. Cl. Sci. Math. Nat.	*Mémoires de l'Academie Polonaise des Sciences et des Lettres. Classe des Sciences Mathématiques et Naturelles.* Cracow.
Mém. Artill. Franç.	*Mémorial de l'Artillerie Française.* [Abstracted by *Index Aeronauticus.*]
Mém. Soc. Roy. Sci. Liége.	*Mémoires de la Société Royale des Sciences de Liége.* L'Université, 7 Place du 20 Août, Liége.
**Mém. Soc. Vaud. Sci. Nat.*	*Mémoires de la Société Vaudoise des Sciences Naturelles.* F. Rouge & Cie, Librairie de l'Université, Lausanne.
**Mod. Transp.*	*Modern Transport.* [Abstracted by Metropolitan-Vickers Electrical Co.]
Mon. Not. Astron. Soc. S. Africa.	*Monthly Notices of the Astronomical Society of South Africa.* The Royal Observatory, Cape, South Africa.
**Monogr. Sci. Aero.*	*Monografie Scientifiche di Aeronautica.* [Abstracted by *Index Aeronauticus.*]
**N.Z. Sci. Congr.*	*Reports of the 6th Scientific Congress, New Zealand* (1947). Being Part V of Vol. 77 of the *Transactions of the Royal Society of New Zealand.* Victoria University College, P.O. Box 1580, Wellington, C.1.
**Nat. Peking Univ. Semi-Cent. Vol., Math. Phys. Biol. Ser.*	*The National Peking University Semi-Centennial Volume, Mathematical, Physical and Biological Series.* The University Press, National Peking University, Peking.
Noise and Sound Transmission	*Noise and Sound Transmission.* Report of the 1948 Summer Symposium of the Acoustics Group. The Physical Society, 1 Lowther Gardens, Prince Consort Road, London, S.W.7.
**Nova Acta Reg. Soc. Sci. Upsaliensis*	*Nova Acta Regiae Societatis Scientiarum Upsaliensis.* Meteorologiska Institutionen vid Kungl. Universitetet. Uppsala.
**Ottica*	*Ottica (Firenze).* [Abstracted by *Mathematical Reviews.*]
**Pakistan J. Sci. Res.*	*Pakistan Journal of Scientific Research.* Pakistan Association for the Advancement of Science, Lahore.
**Paper Mkr*	*Paper Maker.* [Abstracted by *British Rheologists' Club Bulletin.*]
**Paper Tr. J.*	*Paper Trade Journal.* [Abstracted by Metropolitan-Vickers Electrical Co.]
**Proc. Amer. Soc. Test. Mater.*	*Proceedings of the American Society for Testing Materials.* [Abstracted by Metropolitan-Vickers Electrical Co.]
Proc. Egyptian Acad. Sci.	*Proceedings of the Egyptian Academy of Sciences.* "Dar el Hikma," 42 Qasr el Aini Street, Cairo.
**Proc. 1st Int. Congr. Rheol. Scheveningen*	*Proceedings of the First International Congress on Rheology*, 1948. North Holland Publishing Co. [Abstracted by the *British Rheologists' Club Bulletin.*]
Proc. Nova Scotian Inst. Sci.	*Proceedings of the Nova Scotian Institute of Science.* Halifax, Nova Scotia.
Progr. Theor. Phys.	*Progress of Theoretical Physics.* Progress of Theoretical Physics Publishing Society, Department of Physics, Kyoto University, Kyoto. [Change of address.]
Przegl. Telekomun.	*Przeglad Telekomunikacyjny.* Nowogrodzka 45, Warsaw III p.
Publ. Astron. Soc. Japan	*Publications of the Astronomical Society of Japan.* Tokyo Astronomical Observatory, Mitaka, Tokyo.
Publ. Sci. Ass. Océanogr. Phys.	*Publication Scientifique de l'Association d'Océanographie Physique.* Union Géodésique et Géophysique Internationale. Det Geofysiske Institutt, Oslo.
**Pulp Pap. Mag. Can.*	*Pulp and Paper Magazine of Canada.* [Abstracted by *British Rheologists' Club Bulletin.*]
**Pwr Engng*	*Power Engineering.* [Abstracted by Metropolitan-Vickers Electrical Co.]
**Pwr Gener.*	*Power Generation.* [Abstracted by Metropolitan-Vickers Electrical Co.]
Radio-Electronics	*Radio-Electronics.* [Formerly *Radio-Craft.*] Erie Avenue F to G Street, Philadelphia 32, Pennsylvania.
**"Relations between Solar and Terrestrial Phenomena." Sixth Report, I.C.S.U.* (1948)	*Sixth Report of the Commission for the Study of Relations between Solar and Terrestrial Phenomena* (1948). International Council of Scientific Unions, Gonville and Caius College, Cambridge.
Rensselaer Polytech. Inst. Bull., Engng Sci. Ser.	*Rensselaer Polytechnic Institute Bulletin, Engineering and Science Series.* Publications Department, Rensselaer Polytechnic Institute, Troy, New York.
**Rep. Cent. Radio Prop. Lab.* (*U.S. Bur. Stand.*).	*Report of the Central Radio Propagation Laboratory.* U.S. Department of Commerce, National Bureau of Standards, Washington, D.C.
**Rep. Nat. Adv. Comm. Aero. Wash.*	*Report of the National Advisory Committee for Aeronautics, Washington.* [Abstracted by *Index Aeronauticus.*]
Resonant Absorbers and Reverberation	*Resonant Absorbers and Reverberation.* Papers and discussions of the First Summer Symposium of the Acoustics Group, 1947. The Physical Society, 1 Lowther Gardens, Prince Consort Road, London, S.W.7.
Rev. Alsthom	*Revue Alsthom.* [See under *Revue d'Electricité et de Mécanique.*]
Rev. Chim. Pura Appl.	*Revista de Chimica Pura e Applicada.* Laboratorio Ferreira da Silva, Faculdade da Ciencias, Porto.
Rev. Elect. Méc.	*Revue d'Electricité et de Mécanique.* Société Générale de Constructions Electriques et Mécaniques Alsthom. 38 Avenue Kléber, Paris (XVI^{e}).
Rev. Fac. Sci. Univ. Istanbul	*Revue de la Faculté des Sciences de l'Université d'Istanbul.* [See under *Istanbul Üniversitesi Fen Fakultesi Mecmuasi.*]
**Rev. Gén. Caoutch.*	*Revue Générale du Caoutchouc.* [Abstracted by Research Association of British Rubber Manufacturers.]
Rev. Geofis.	*Revista de Geofisica.* Instituto Nacional de Geofisica, Rios Rosas 9, Madrid.
**Rev. Inst. Franç. Pétrole*	*Revue de l'Institut Français de Pétrole.* [Abstracted by *Fuel Abstracts.*]
Rev. Tech. Luxemb.	*Revue Technique Luxembourgeoise.* L'Association Luxembourgeoise des Ingenieurs et Industriels. 13 Place d'Armes, Luxembourg.

Roy. Inst. Techn., Stockholm, Avh.	*Royal Institute of Technology, Avhandlingar.* Stockholm, Sweden.
**Rozpravy II Třídy České Akad.*	*Rozpravy České Akademie Věd a Umění Třída II. (Matematicko-Přírodovědecká.)* [Abstracted by *Mathematical Reviews.*]
S.B. Dtsch. Akad. Wiss. Berlin., Math.-nat. Kl.	*Sitzungsberichte der Deutschen Akademie der Wissenschaften zu Berlin. Mathematisch-naturwissenschaftliche Klasse.* Unter den Linden 9, Berlin, N.W.7.
**S.B. Math.-nat. Kl. Bayer. Akad. Wiss.*	*Sitzungsberichte der Mathematisch-naturwissenschaftlichen Klasse der Bayerischen Akademie der Wissenschaften zu München.* [Abstracted by *Mathematical Reviews.*]
Sci. Pap. Inst. Phys. Chem. Res., Tokyo	*Scientific Papers of the Institute of Physical and Chemical Research.* The Scientific Research Institute Ltd., Komagome, Bunkyo-Ku, Tokyo. [Now *Journal of the Scientific Research Institute.*]
Sci. Rep. Res. Inst. Tôhoku Univ. Ser. A.	*Science Reports of the Research Institutes, Tôhoku University, Series A (Physics, Chemistry and Metallurgy).* Tôhoku University, Sendai.
Scientia	*Scientia.* 4 Via Roncaglia, Asso, Como.
**Sheet Metal Ind.*	*Sheet Metal Industry.* [Abstracted by *British Rheologists' Club Bulletin.*]
**Smithsonian Rep.*	*Smithsonian Report.* The Smithsonian Institution, Washington, D.C.
**Soc. Sci. Lodz, Sect. III.*	*Societas Scientiarum Lodziensis, Sectio III.* Lodz.
Spectrochim. Acta	*Spectrochimica Acta.* Butterworth-Springer, 436 Strand, London, W.C.2. [Change of address.]
**Stahl u. Eisen.*	*Stahl und Eisen.* [Abstracted by Metropolitan-Vickers Electrical Co.]
Svenska VattenkrFören. Publ. Medd.	*Svenska Vattenkraftföreningens Publikationer. Meddelande.* Norrlandsgatan 16, Stockholm.
Tech. Mitt. PTT, Bern	*Technische Mitteilungen.* [Formerly listed under *Technische Mitteilungen von der Schweizerischen Post-Telegraphen- und Telephonverwaltung.*] Die Schweizerische Post-, Telegraphen- und Telephonverwaltung, Speichergasse 6, Bern.
Teleteknik	*Teleteknik.* Valkendorfsgade 9[1], Copenhagen.
Tesla Tech. Rep.	*Tesla Technical Reports.* Kovo Ltd., Mezibranska 32, Prague II.
**Text. Mfr, Manchr.*	*Textile Manufacturer, Manchester.* [Abstracted by Metropolitan-Vickers Electrical Co.]
Trans. Roy. Inst. Techn. Stockholm	*Transactions of the Royal Institute of Technology.* Stockholm. [Now *Kungl. Tekniska Högskolans Handlingar.*]
**Uchen. Zap. Mosk. Gos. Univ. Mekh.*	*Uchenie Zapiski Mosk. Gos. Univ. Mekhanika.* [Abstracted by *Applied Mechanics Reviews.*]
Univ. Bergen. Årb.	*Universitet i Bergen. Årbok.* [Formerly *Bergens Museums Årbok.*] Fysisk Institutt.
**Univ. Nac. Tucumán, Publ.*	*Universidad Nacional de Tucumán, Publicación.* Instituto de Fisica, Universidad Nacional de Tucumán, Argentina.
**Veröff. Bad. LandSternw. Heidelberg.*	*Veröffentlichungen der Badischen Landesternwarte zu Heidelberg* (Königstuhl). Heidelberg.
Vortr. Schr. Dtsch. Akad. Wiss. Berlin	*Vorträge und Schriften. Deutsche Akademie der Wissenschaften zu Berlin.* [See under *Abhandlungen* and *Sitzungsberichte.*]
**Z. Met.*	*Zeitschrift für Meteorologie.* [Abstracted by *Meteorological Abstracts.*]
**Z. Metallkde*	*Zeitschrift für Metallkunde.* [Abstracted by *Applied Mechanics Reviews.*]
**Zavodskaya Lab.*	*Zavodskaya Laboratoriya.* [Abstracted by *Photographic Abstracts.*]
**Zh. Fiz. Khim.*	*Zhurnal Fizicheskoi Khimii.* Cherkasski Per 2, Moscow.
**Zh. Obshch. Khim.*	*Zhurnal Obshchei Khimii.* Cherkasski Per 2, Moscow.

ABSTRACTING JOURNALS. SUPPLEMENT.

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BROOKHAVEN GUIDE TO RUSSIAN LITERATURE	*Guide to Russian Scientific Periodical Literature.* Information and Publications Division, Brookhaven National Laboratory, Upton, Long Island, New York.
COAL UTILISATION RESEARCH ASSOCIATION	*Monthly Bulletin of The British Coal Utilisation Research Association.* 13 Grosvenor Gardens, London, S.W.1.
METEOROLOGICAL ABSTRACTS	*Meteorological Abstracts and Bibliography.* American Meteorological Society, 5 Joy Street, Boston 8, Massachusetts.

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SECTION A

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SECTION A, PHYSICS

SECTION B, ELECTRICAL ENGINEERING

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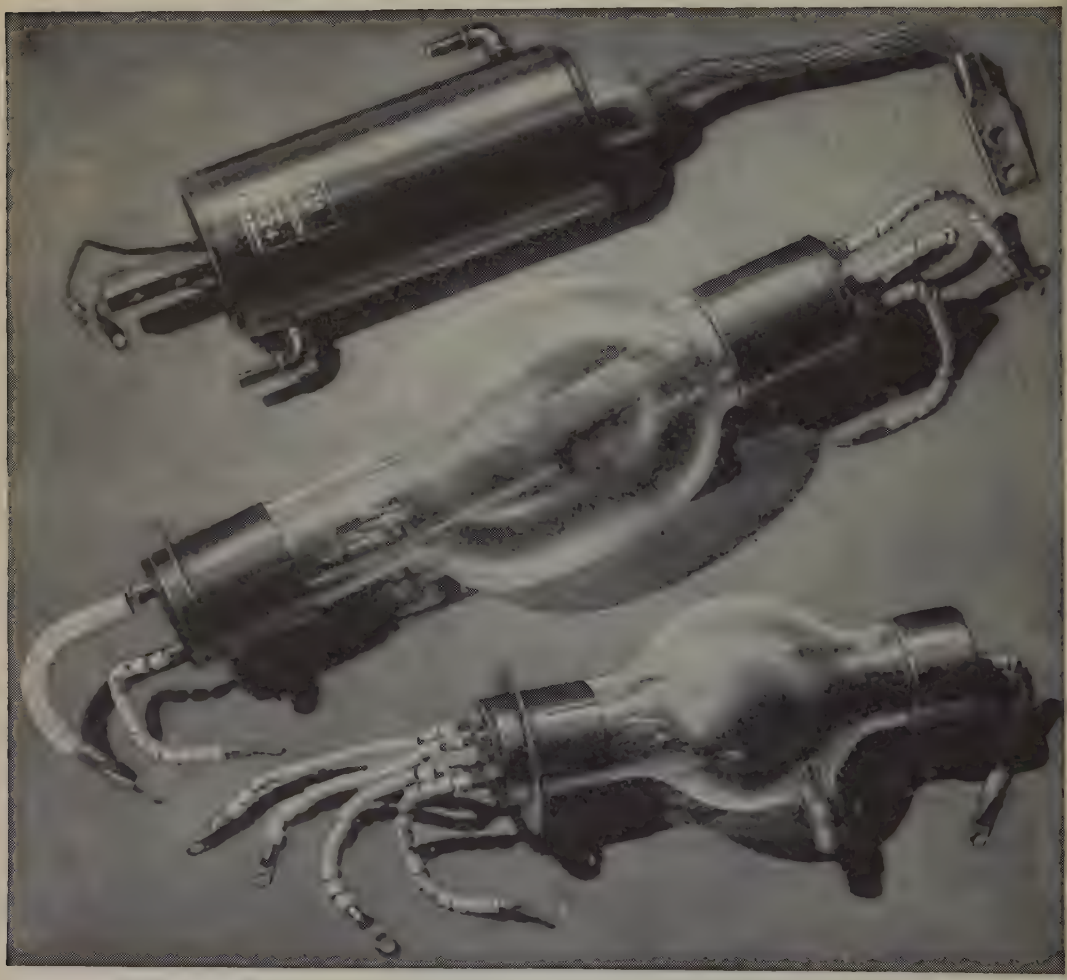
ABSTRACTS 1–644

VOLUME 53 **JANUARY 1950** NUMBER 625

Valves for Research and Development



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Mechanical testing
Non-destructive testing
Industrial radiography
Electrical and magnetic measurements and instruments
Electronic relays and counters
Automatic control mechanisms
Applied electrochemistry
Photocells
Thermionic tubes
Cathode-ray tubes
X-ray tubes
Amplifiers
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Mechanical engineering
Illumination
Metallurgy

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LIST OF JOURNALS

The following list gives the full titles of journals referred to in *Science Abstracts*. The addresses given are believed to be correct, but no responsibility can be accepted for errors. Journals marked * are not received regularly.

A.C.E.C. Charleroi	*Ateliers de Constructions Electriques de Charleroi.* A.C.E.C., 56 Victoria Street, London, S.W.1.
A.R. Nat. Bur. Stand., Wash.	*Annual Report of the National Bureau of Standards.* United States Government Printing Office, Washington 25, D.C.
A.R. Nat. Res. Coun. Can.	*Annual Reports of the National Research Council of Canada.* Ottawa.
A.W.A. Tech. Rev.	*A.W.A. Technical Review.* Amalgamated Wireless Australasia, 554 Parramatta Road, Sydney.
**Acta Bolyaiana*	*Acta Bolyaiana.* The Bolyai University, Hungarian University of Roumania, Cluj.
**Acta Chem. Scand.*	*Acta Chemica Scandinavica.* Einar Munksgaard, Copenhagen.
Acta Cryst.	*Acta Crystallographica.* International Union of Crystallography. Cambridge University Press, Bentley House, Euston Road, London, N.W.1.
Acta Phys. Austriaca	*Acta Physica Austriaca.* Springer-Verlag, Mölkerbastei 5, Vienna I.
Acta Phys. Polon.	*Acta Physica Polonica.* A1. Slowackiego 15. m.g. Cracow.
Acta Polytech.	*Acta Polytechnica.* Royal Swedish Academy of Engineering Sciences, Stockholm.
Acta Pont. Acad. Sci.	*Acta Pontificia Academia Scientiarum.* Vatican City.
Acta Soc. Sci. Fennicae	*Acta Societas Scientiarum Fennicae.* Helsinki.
Adv. Electronics	*Advances in Electronics* (Ed. L. Martin). Academic Press, 125 E. 23rd Street, New York 10.
**Advm. Sci.*	*Advancement of Science.* British Association for the Advancement of Science, Burlington House, London, W.1.
**Aero. Res. Coun. (Min. of Supply) Rep. Mem.*	*Aeronautical Research Council (Ministry of Supply) Reports and Memoranda.* H.M. Stationery Office, Kingsway, London, W.C.2.
Aero. Res. Rep. Coun. Sci. Industr. Res. Aust.	*Aeronautical Research Report. Council for Scientific and Industrial Research, Commonwealth of Australia.* 314 Albert Street, East Melbourne, C.2, Victoria.
Agua y Energia	*Agua y Energia.* Uruguay No. 291, 1r. Piso, Buenos Aires.
Allis Chalmers Elect. Rev.	*Allis Chalmers Electrical Review.* Allis-Chalmers, Milwaukee I, Wisconsin.
Alta Frequenza	*Alta Frequenza.* Associazione Elettrotecnica Italiana, Via San Paolo 10, Milan.
**Amer. J. Math.*	*American Journal of Mathematics.* [Abstracted by *Applied Mechanics Reviews.*]
Amer. J. Phys.	*American Journal of Physics.* American Institute of Physics, 57 E. 55th Street, New York 22.
Amer. J. Roentgenol. and Radium Ther.	*American Journal of Roentgenology and Radium Therapy.* Charles C. Thomas, 310–27 East Lawrence Avenue, Springfield, Illinois.
**Amer. Soc. Test. Mater., Prepr.*	*American Society for Testing Materials, Preprints.* Philadelphia, Pennsylvania.
**Amer. Stand.*	*American Standards.* American Standards Association, 70 East 45th Street, New York 17, N.Y.
An. Acad. Brasil. Ciênc.	*Anais da Academia Brasileira de Ciências.* Caixa Posta 229, Rio de Janeiro.
An. Mec. y Elect.	*Anales de Mecanica y Electricidad.* Reina 31, Madrid.
An. Real Soc. Esp. Fís. y Quím.	*Anales de la Real Sociedad Española de Física y Química.* Ciudad Universitaria, Madrid.
Analyt. Chem.	*Analytical Chemistry.* [Formerly *Industr. Engng Chem. (Analyt. Edit.)*] 20th and Northampton Street, Easton, Pennsylvania.
**Angew. Chem.*	*Angewandte Chemie.* Verlag Chemie, Hauptstr. 127, Weinheim/Bergstr. 17 (a), Germany.
Ann. Acad. Sci. Fennicae, Ser. A III.	*Annales Academiæ Scientiarum Fennicae, Ser. A III. Geologica-Geographica.* Helsinki.
Ann. Astrophys.	*Annales d'Astrophysique.* 3 and 5 Boulevard Pasteur; 165 Rue de Sèvres, Paris (XV^{e}).
**Ann. Fac. Phil. Univ. Skopje (Sect. Sci. Nat.)*	*Annuaire de la faculté de philosophie de l'Université de Skopje (Section des sciences naturelles).* Institut de Physique de l'Université d'Etat Skopje (Macedoine), Postanski fah 55, Yugoslavia.
**Ann. Fac. Sci. Univ. Toulouse*	*Annales de la Faculté des Sciences de l'Université de Toulouse pour les Sciences Mathématiques et les Sciences Physiques.* [Abstracted by *Mathematical Reviews.*]
Ann. Franç. Chronom.	*Annales Françaises de Chronometrie.* Observatoire National de Besançon.
Ann. Geofis.	*Annali di Geofisica.* Istituto Nazionale di Geofisica, Città Universitaria, Rome.
Ann. Harv. Coll. Obs.	*Annals of the Harvard College Observatory.* The Observatory, Cambridge, Mass.
Ann. N.Y. Acad. Sci.	*Annals of the New York Academy of Sciences.* Central Park West at 79th Street, New York 24.
Ann. Phys., Lpz.	*Annalen der Physik.* J. A. Barth, Leipzig.
Ann. Phys., Paris	*Annales de Physique.* Masson et Cie, 120 Boulevard Saint-Germain, Paris (VI^{e}).
Ann. Radioeléctricité	*Annales de Radioélectricité.* Compagnies Françaises Associées de T.S.F. 79 Boulevard Haussmann, Paris.
Ann. Sci. Univ. Jassy	*Annales Scientifique de l' Université de Jassy.* Jassy.
Ann. Soc. Sci. Brux.	*Annales de la Société Scientifique de Bruxelles.* 11 Rue des Recollets, Louvain.

Ann. Solar Phys. Obs., Camb.	*Annals of the Solar Physics Observatory, Cambr dge.* Cambridge University Press, Bentley House, Euston Road, London, N.W.1.
Ann. Télécommun.	*Annales de Télécommunication.* Centre National d'Etudes des Télécommunications, 24 rue Morère, Paris (XIV^e).
**Ann. Univ. Ferrara*	*Annali della Università di Ferrara.* [Abstracted by *Mathematical Reviews.*]
**Ann. Univ. Grenoble*	*Annales de l' Université de Grenoble.* Grenoble.
**Ann. Univ. M. Curie-Sklodowska*	*Annales Universitatis M. Curie-Sklodowska.* Lublin.
Appl. Sci. Res.	*Applied Scientific Research.* Martinus Nijhoff, The Hague.
**Arch. Biochem.*	*Archives of Biochemistry.* Academic Press, Prince and Lemon Streets, Lancaster, Pennsylvania.
Arch. elekt. Übertragung	*Archiv der elektrischen Übertragung.* Mühlweg 2, Wiesbaden-Biebrich.
Arch. Elektrotech.	*Archiv für Elektrotechnik.* Springer-Verlag, Jebenstr. 1, Berlin-Charlottenburg.
**Arch. Math. Naturwidensk.*	*Archiv for Mathematik og Naturwidenskab.* Cammermeyers Bokhandel, Oslo.
**Arch. Metallkde*	*Archiv für Metallkunde.* Verlag Chemie Hauptstr. 127, Weinheim/Bergstrasse 17 (a), Germany.
Arch. Sci.	*Archives des Sciences.* [Formerly *Archives des Sciences Physiques et Naturelles.*] Institut de Physique de l'Université, Geneva.
Arch. tech. Messen	*Archiv für technisches Messen.* Leibniz Verlag, Lotzbeckstr. 2b, Munich.
Ark. Astr.	*Arkiv för Astronomi.* [Formerly *Arkiv för Matematik, Astronomi och Fysik.*] Kungl. Svenska Vetenskapsakademien, Stockholm.
Ark. Fys.	*Arkiv för Fysik.* [Formerly *Arkiv för Matematik, Astronomi och Fysik.*] Kungl. Svenska Vetenskapsakademien, Stockholm.
Ark. Geofys.	*Arkiv för Geofysik.* Kungl. Svenska Vetenskapsakademien, Stockholm.
Ark. Kemi	*Arkiv för Kemi.* [Formerly *Arkiv för Kemi, Mineralogi och Geologi.*] Kungl. Svenska Vetenskapsakademien, Stockholm.
Ark. Kemi Min. Geol.	[See *Ark. Kemi; Ark. Min. Geol.*]
Ark. Mat.	*Arkiv för Matematik.* [Formerly *Arkiv för Matematik, Astronomi och Fysik.*] Kungl. Svenska Vetenskapsakademien, Stockholm.
Ark. Mat. Astr. Fys.	[See *Ark. Mat.; Ark. Astr.; Ark. Fys.*]
Ark. Min. Geol.	*Arkiv för Mineralogi och Geologi.* [Formerly *Arkiv för Kemi, Mineralogi och Geologi.*] Kungl. Vetenskapsakademien, Stockholm.
Asea J.	*Asea Journal.* ASEA Electric Ltd., Fulbourne Road, London, E.17; Allmänna Svenska Elektriska AB, Västerås.
**Astr. J.*	*Astronomical Journal.* Dudley Observatory, Albany, N.Y.
**Astr. J., USSR*	*Astronomical Journal, USSR.* B. Cerkasskii per., d 2, Akademkniga, Moscow.
**Astr. Nachr.*	*Astronomische Nachrichten.* Akademie-Verlag, Schiffbauerdamm 19, Berlin, N.W.7.
Astr. News Lett.	*Astronomical News Letter.* Harvard College Observatory, Cambridge, Mass.
Astrophys. J.	*Astrophysical Journal.* University of Chicago Press, 5750 Ellis Avenue, Chicago.
Atomics	*Atomics.* (Incorporating *Forecast.*) Leonard Hill Technical Group, 17 Stratford Place, London, W.1.
**Atti Accad. d'Italia* (*Mem. Cl. Sci. Fis. Mat. Nat.*)	*Atti dell'Accademia d'Italia. Memorie della Classe di Scienze Fisiche, Matematiche e Naturali.* Rome.
**Atti Accad. d'Italia* (*R.C. Cl. Sci. Fis. Mat. Nat.*)	*Atti dell'Accademia d'Italia. Rendiconti della Classe di Scienze Fisiche, Matematiche e Naturali.* Rome.
Atti Accad. Naz. Lincei (*Mem. Cl. Sci. Fis. Mat. Nat.*)	*Atti dell' Accademia Nazionale di Lincei. Memorie della Classe di Scienze Fisiche, Matematiche e Naturali.* Rome.
Atti Accad. Naz. Lincei (*R.C. Cl. Sci. Fis. Mat. Nat.*)	*Atti dell' Accademia Nazionale di Lincei. Rendiconti della Classe di Scienze Fisiche, Matematiche e Naturali.* Rome.
**Atti Accad. Sci. Torino*	*Atti dell' Accademia delle Scienze di Torino.* Via Accademia delle Scienze 6 and Via Maria Vittoria 3, Turin (101).
**Atti Congr. Marconiana Radio*	*Atti del Congresso Internazionale per il Cinquantenario della Scoperta Marconiana della Radio.* Consiglio Nazionale delle Ricerche, Piazzale delle Scienze 7, Rome.
Atti Fond. "Giorgio Ronchi"	*Atti Fondazione "Giorgio Ronchi."* Via S. Leonardo 79, Firenze-Arcetri, Italy.
Audio Engng	*Audio Engineering.* Radio Magazines, 342 Madison Avenue, New York 17.
Aust. J. Sci. Res. A.	*Australian Journal of Scientific Research.* Council for Scientific and Industrial Research, 314 Albert Street, East Melbourne, C.2, Victoria.
**Avtomat. i Telemekh.*	*Avtomatika i Telemekhanika.* Institute of Automatics and Telemechanics. Moscow Centre, Mal. Kharitonievsky, Per 4, Moscow.
B.B.C. Quart.	*B.B.C. Quarterly.* Broadcasting House, Portland Place, London, W.1.
**Bányász. Kohász. Lap.*	*Bányászati és Kohászati Lapok.* Pasarati-ut 106, Budapest II.
Beama J.	*Beama Journal.* The British Electrical and Allied Manufacturers' Association, 36 Kingsway, London, W.C.2.
Bell Lab. Rec.	*Bell Laboratory Record.* American Telephone and Telegraph Co., 195 Broadway, New York.
Bell Syst. Tech. J.	*Bell System Technical Journal.* American Telephone and Telegraph Co., 195 Broadway, New York.
Bell. Teleph. Mag.	*Bell Telephone Magazine.* American Telephone and Telegraph Co., 195 Broadway, New York.
Bergens Museums Årb.	*Bergens Museums Årbok.* Universitetsbiblioteket, Bergen.
**BIOS Rep.*	*BIOS Reports.* H.M. Stationery Office, Kingsway, London, W.C.2.
Bol. Acad. Cienc., Venezuela	*Boletin de la Academia de Ciencias Físicas, Matematicas y Naturales.* Caracas.

Bol. Fac. Ing. Montevideo	*Boletin da la Facultad de Ingenieria de Montevideo.* Cerrite 73, Montevideo.
Brit. J. Appl. Phys.	*British Journal of Applied Physics.* Institute of Physics, 47 Belgrave Square, London, S.W.1.
Brit. J. Radiol.	*British Journal of Radiology.* British Institute of Radiology, 32 Welbeck Street, London, W.1.
Brit. Med. Bull.	*British Medical Bulletin.* Medical Department, British Council, 3 Hanover Street, London, W.1.
Brit. Stand.	*British Standards.* British Standards Institution, 24–8 Victoria Street, London, S.W.1.
**Brown Boveri Co. Nachr.*	*Brown Boveri Company Nachrichten.* Mannheim.
Brown Boveri Rev.	*Brown Boveri Review.* British Brown-Boveri, Artillery Mansions, 75 Victoria Street, London, S.W.1.
**Bruel and Kjaer Tech. Rev.*	*Bruel and Kjaer Technical Review.* [Abstracted by *Metropolitan-Vickers Electrical Co., Ltd.*]
BTH Activ.	*BTH Activities.* British Thomson-Houston, Rugby.
Bull. Acad. Roy. Belg. Cl. Sci.	*Bulletin de la Classe des Sciences de l'Académie Royale de Belgique.* Palais des Académies, rue Ducale 1, Brussels.
Bull. Acad. Sci. URSS, Dép. Tech. Sci.	*Bulletin de l'Académie des Sciences de l'URSS, Département des Sciences Techniques.* [See *Izv. Akad. Nauk, SSSR, Otdel. Tekn. Nauk.*]
Bull. Acad. Sci. URSS, Sér. Phys.	*Bulletin de l'Académie des Sciences de l' URSS, Séries Physiques.* [See *Izv. Akad. Nauk, SSSR, Ser. Fiz.*]
**Bull. Amer. Ceram. Soc.*	*Bulletin of the American Ceramic Society.* 20th and Northampton Street, Easton, Pennsylvania.
Bull. Amer. Met. Soc.	*Bulletin of the American Meteorological Society.* Prince and Lemon Street, Lancaster, Pennsylvania.
Bull. Ass. Suisse Elect.	*Bulletin de l'Association Suisse des Electriciens.* Secrétariat Général de l'A.S.E. et de l'U.C.S. Seefeldstrasse 301, Zürich 8.
Bull. Astr., Paris	*Bulletin Astronomique.* Librairie Gauthier-Villars, Quai des Grands-Augustins 55, Paris.
Bull. Calcutta Math. Soc.	*Bulletin of the Calcutta Mathematical Society.* 92 Upper Circular Road Calcutta.
**Bull. Cent. Obs. Poulkovo*	*Bulletin of the Central Observatory at Poulkovo.*
Bull. Ecole Polyt. Jassy	*Bulletin de l' Ecole Polytechnique de Jassy.* Jassy.
Bull. Et. Rech. Tech.	*Bulletin d'Etudes et de Recherches Techniques.* Institut de Documentation, Bibliographie et Editions Techniques, Rue Gabriel Péri 3, Bucarest.
Bull. Géod.	*Bulletin Géodésique.* Bureau Central de l'Association Internationale de Géodésie, 19 rue Auber, Paris (IX^{e}).
Bull. Harv. Coll. Obs.	*Bulletin of the Harvard College Observatory.* The Observatory, Cambridge, Massachusetts.
**Bull. Inst. Nat. Rech. Tech. Roumanie*	*Bulletin de l'Institut National de Recherches Technologiques de Roumanie.* Strada Gabriel Peri 3, Bucharest III.
Bull. Int. Acad. Polonaise Sci. Lett.	*Bulletin International de l'Académie Polonaise des Sciences et des Lettres.* Cracow.
Bull. Int. Acad. Tchèque Sci.	*Bulletin International Académie Tchèque des Sciences.* Česká Akademie Věd a Umění, Narodní tř. 3, Prague.
Bull. Int. Inst. Refrig.	*Bulletin of the International Institute of Refrigeration* [English edition]. 9 Avenue Carnot, Paris (XVII^{e}).
Bull. Int. Rly Congr. Ass.	*Monthly Bulletin of the International Railway Congress Association* [English edition]. 19 rue du Beau-Site, Brussels.
Bull. Math. Biophys	*Bulletin of Mathematical Biophysics.* University of Chicago Press, 5750 Ellis Avenue, Chicago.
Bull. Oerlikon	*Bulletin Oerlikon.* Ateliers de Constructions Oerlikon, Zürich; Oerlikon Ltd., Victoria House, Southampton Row, London, W.C.1.
Bull. Sci. Ass. Ing. Elect. Montefiore	*Bulletin Scientifique de l'Association des Ingénieurs Électriciens sortis de l'Institut Electrotechnique Montefiore.* [Formerly *Bull. Ass. Ing. Elect. Montefiore.*] 31 Rue Saint Gilles, Liège.
Bull. Seism. Soc. Amer.	*Bulletin of the Seismological Society of America.* University of Chicago Press, Berkeley, California.
Bull. Soc. Belge Elect.	*Bulletin de la Société Belge des Electriciens.* 8 rue Sabatier, Marcinelle.
**Bull. Soc. Chim. Belgrade*	*Bulletin de la Société Chimique de Belgrade.* [Abstracted by the *International Institute of Refrigeration.*]
Bull. Soc. Franç. Elect.	*Bulletin de la Société Française des Electriciens.* 8–14 Avenue Pierre Larousse, Malakoff (Seine).
**Bull. Soc. Franç. Min.*	*Bulletin de la Société Française de Mineralogie.* Masson et Cie, 120 Boulevard Saint-Germain, Paris (VI^{e}).
Bull. Soc. Roumaine de Phys.	*Bulletin de la Société Roumaine de Physique.* Laboratoire d'Acoustique et Optique, Université de Bucarest, Strada Academiei 14, Bucharest.
Bull. Soc. Roy. Belge Ingén. Ind.	*Bulletin de la Société Royale Belge des Ingénieurs et des Industriels.* 3 Rue Ravenstein, Brussels.
Bull. Univ. Ill. Engng Exp. Sta.	*Bulletin of the University of Illinois Engineering Experiment Station.* Urbana.
C.R. Acad. Bulg. Sci. (Sci. Math. Nat.)	*Comptes Rendus de l'Academie Bulgare des Sciences (Sciences Mathématiques et Naturelles).* Sofia.
C.R. Acad. Sci., Paris	*Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences.* Librairie Gauthier-Villars, Quai des Grands-Augustins 55, Paris.
C.R. Acad. Sci. URSS	*Comptes Rendus de l'Académie des Sciences de l'URSS.* [See *Dokl. Akad. Nauk, SSSR.*]
Câbles & Transm.	*Câbles et Transmission.* SOTELEC, 16 rue de la Beaume, Paris (VIII^{e}).
**Cah. de Phys.*	*Cahiers de Physique.* 3 and 5 Boulevard Pasteur, Paris (XV^{e}).
Canad. J. Res. A–F	*Canadian Journal of Research, Sections A–F.* The National Research Council of Canada, Ottawa.

Čas. Pěst. Mat. Fis.	*Časopis pro Pěstování Matematiky a Fisiky.* Žinta 25, Prague II.
**Cent. Sci. Tech. Batiment, Monogr.*	*Centre Scientifique et Technique du Batiment, Monographe.* 31 Avenue Pierre Ier-de-Serbie, Paris (XVIe).
**Chem. Engng News*	*Chemical and Engineering News.* 20th and Northampton Street, Easton, Pennsylvania.
Chem. Rev.	*Chemical Reviews.* The Williams and Wilkins Company, Mt Royal and Guilford Avenues, Baltimore 2, Maryland.
**Chem. Weekbl.*	*Chemisch Weekblad.* Centen's Uitgevers Maatschappij, Sarphatikade 12, Amsterdam.
Chimia	*Chimia.* Rascher-Verlag, Zürich.
Chin. J. Phys.	*Chinese Journal of Physics.* Chinese Physical Society, National Academy of Peiping, 42 Tung Huang Cheng Ken, Peiping.
Cienc. y Tecn.	*Ciencia y Tecnica.* Calle Peru 272, Buenos Aires.
Circ. Harvard Coll. Obs.	*Circular of the Harvard College Observatory.* Cambridge, Massachusetts.
Circ. Nat. Bur. Stand., Wash.	*Circulars of the National Bureau of Standards.* U.S. Government Printing Office, Washington 25, D.C.
Circ. Un. Obs. S. Afr.	*Circular of the Union Observatory.* Johannesburg.
Cirk. TelegrStyr. Tekn. Byrå	*Cirkulär från Telegrafstyrelsens Tekniska Byrå.* Stockholm.
**Coll. Czech. Chem. Commun.*	*Collection of Czechoslovak Chemical Communications.* [Abstracted by *British Abstracts.*]
**Colloid J. USSR*	*Colloid Journal of the USSR.* [Abstracted by *British Abstracts.*]
Colo. Sch. Min. Quart.	*Colorado School of Mines Quarterly.* Golden, Colorado.
**Combustion*	*Combustion.* 200 Madison Avenue, New York 16, New York.
Comment. Phys. Math., Helsingf.	*Commentationes Physico-Mathematicae.* Societas Scientiarum Fennicae. Helsinki.
**Comment. Pont. Acad. Sci.*	*Commentationes Pontificia Academia Scientiarum.* Vatican City.
Commun. News	*Communication News.* Philips Electrical, Century House, Shaftesbury Avenue, London, W.C.2.
Commun. Pure Appl. Math.	*Communications on Pure and Applied Mathematics.* Interscience Publishers, 215 Fourth Avenue, New York 3: 2a Southampton Row, London, W.C.1.
Commun. Rev.	*Communication Review.* Communication Engineering Pty Ltd., 18 Hunter Street, Sydney.
Communications	*Communications.* [See *Televis. Engng.*]
Conf. Int. Gr. Rés. Elect. [*CIGRE*]	*Conférence Internationale des Grands Réseaux Electriques.* 112 Boulevard Haussmann, Paris.
Contr. Dom. Obs., Ottawa	*Contributions from the Dominion Observatory, Ottawa.* Department of Mines and Resources, Ottawa.
Contr. Meteor. Soc.	*Contributions of the Meteoritical Society.* 1010 Morningside Drive, Fort Worth 3, Texas.
**Corrosion Mater. Protect.*	*Corrosion and Material Protection.* Corrosion Publishing Company, 1131 Wolfendale Street, Pittsburgh, Pennsylvania. [Publication ceased Oct., 1948.]
Curr. Sci.	*Current Science.* Current Science Association, Bangalore.
Dep. Sci. Industr. Res. Radio Res. Rep.	*Department of Scientific and Industrial Research, Radio Research Reports.* Dorland House, 14–16 Regent Street, London, S.W.1.
Disc. Faraday Soc.	*Discussions of the Faraday Society.* Gurney and Jackson, 98 Great Russell Street, London, W.C.2; Tweeddale Court, Edinburgh.
**Distrib. Elect.*	*Distribution of Electricity.* W. T. Henley's Telegraph Works, 51–3 Hatton Garden, London, E.C.1.
Dokl. Akad. Nauk, SSSR	*Doklady Akademii Nauk, SSSR.* Moscow and Leningrad.
Dyna	*Dyna.* Navarra 1–1°, Bilbao.
Econ. Proc. Roy. Dublin Soc.	*Economic Proceedings of the Royal Dublin Society.* Ballsbridge, Dublin.
**Edison Elect. Inst. Bull.*	*Edison Electric Institute Bulletin.* 402 Lexington Avenue, New York 17, New York.
Elect. Commun.	*Electrical Communication.* International Telephone and Telegraph Corporation, 67 Broad Street, New York; Connaught House, Aldwych, London, W.C.2.
Elect. Engng, N.Y.	*Electrical Engineering.* American Institute of Electrical Engineers, 33 West 39th Street, New York.
**Elect. Industr.*	*Electrical Industries.* 23 Great Queen Street, London, W.C.2.
Elect. Light Pwr	*Electric Light and Power.* 360 N. Michigan Avenue, Chicago 1, Illinois.
Elect. Rev., Lond.	*Electrical Review.* Dorset House, Stamford Street, London, S.E.1.
Elect. Times	*Electrical Times.* Sardinia House, Sardinia Street, London, W.C.2.
Elect. World, N.Y.	*Electrical World.* McGraw-Hill Publishing Co., 330 West 42nd Street, New York; Aldwych House, London, W.C.2.
Electrician	*Electrician.* Bouverie House, 154 Fleet Street, London, E.C.4.
Electro-techniek	*Electro-techniek.* Moorman's Periodieke Pers, The Hague.
Electronic Engng	*Electronic Engineering.* 28 Essex Street, London, W.C.2.
Electronica	*Electronica.* Uitgevers Mij Diligentia, Kalverstraat 35, Amsterdam.
Electronics	*Electronics.* McGraw-Hill Publishing Co., 330 West 42nd Street, New York; Aldwych House, London, W.C.2.
**Electronics Forum*	*Electronics Forum.* Institution of Electronics, 24 Buckingham Street, London, W.C.2.
Electrotechnics	*Electrotechnics.* Indian Institute of Science, Bangalore 3.
Elekt. St.	*Elektricheskie Stantsii.* Ministry of Electric Power Stations. Vetoshnui Per, Moscow.
Elektrichestvo	*Elektrichestvo.* Cherkasski Per, Moscow.

Elektrizitätswirtschaft	*Elektrizitätswirtschaft.* Maschmühlenweg 8–10, Göttingen.
Elektroingeniøren	*Elektroingeniøren.* Dansk Ingeniørforening, 29 Vester Farimagsgade, Copenhagen. [Publication ceased].
Elektrotech. u. Maschinenb. [*EuM*]	*Elektrotechnik und Maschinenbau.* Springer-Verlag, Mölkerbastei 5, Vienna I.
Elektrotech. Obz.	*Elektrotechnicky Obzor.* Vocelova 3, Prague XII.
Elektrotech. Z. [*ETZ*]	*Elektrotechnische Zeitschrift.* Verband Deutscher Elektrotechniker. Friedrich Ebertstr. 111, Wuppertal-Eberfeld.
Elektrotechnik, Berlin	*Elektrotechnik.* Verlag Technik, Dorotheenstrasse 41, Berlin, N.W.7.
Elektrotechnika	*Elektrotechnika.* V. Honvéd-u. 22, Budapest.
Elektroteh. Vestn.	*Elektrotehniski Vestnik.* Elektroinstitut Universe, Aškerčova ul. 11, Lubljana, Yugoslavia.
Elektrotek. Tidsskr.	*Elektroteknisk Tidsskrift.* Fuglehauggt 11, Oslo.
Elektroteknikeren	*Elektroteknikeren.* Østbanegade 7, Copenhagen Ø.
**Elettronica*	*Elettronica.* Via Garibaldi 16, Turin.
Elettrotecnica	*Elettrotecnica.* Associazione Elettrotecnica Italiana, Via S. Paolo 10, Milan.
Endeavour	*Endeavour.* 26 Dover Street, London, W.1.
Energia Elett.	*Energia Elettrica.* Via Revere 14, Milan.
Engineer, Lond.	*The Engineer.* 28 Essex Street, London, W.C.2.
Engineering	*Engineering.* 35–36 Bedford Street, London, W.C.2.
Engl. Elect. J.	*English Electric Journal.* English Electric Co., Stafford.
**Engng Boil. Ho. Rev.*	*Engineering and Boiler House Review.* Engineering Review Publishing Co. Ltd., 23 Great Queen Street, London, W.C.2.
Engng Bull.	*Engineering Bulletin.* Siemens Brothers and Co., Ltd., Woolwich, London, S.E.18.
Engng J., Montreal	*The Engineering Journal.* Engineering Institute of Canada, 2050 Mansfield Street, Montreal.
ERA, Stockholm	*ERA.* Föreningen för Elektricitetens Rationella Användning, Stockholm 3.
Erda	*Erda.* Electrical and Radio Development Association of New South Wales, Assembly Building, 1 Jamieson Street, Sydney.
Ericsson Rev.	*Ericsson Review.* L. M. Ericsson, Stockholm.
Ericsson Tech.	*Ericsson Technics.* L. M. Ericsson, Stockholm.
**Escher Wyss News*	*Escher Wyss News.* Escher Wyss Engineering Works Ltd., Zürich.
Euclides	*Euclides.* Martires Concepcionistas 13, Madrid.
Experientia	*Experientia.* E. Birkhäuser, Elisabethenstrasse 15, Basle.
Fernmeldetech. Z. [*FTZ*]	*Fernmeldetechnische Zeitschrift.* Friedr. Vieweg & Sohn, Brunswick.
Fertigungstech.	*Fertigungstechnik* [Issued with *Die Technik*]. Verlag Technik, Dorotheenstrasse 41, Berlin, N.W.7.
FIAT Rep.	*FIAT Reports.* H.M. Stationery Office, Kingsway, London, W.C.2.
**FIAT Rev. German Sci.* (1939–46)	*FIAT Review of German Science* (1939–1946). Office of Military Government of Germany (U.S. Economics Division, Research Control Branch), Berlin. APO 742, U.S. Army.
**Forsvarets ForsknInst. Årb.*	*Forsvarets Forskningsinstitut Årbok.* Norwegian Defence Research Establishment, Storgaten 33, Oslo.
**Fortschr. d. Tech.*	*Fortschritte der Technik.* Georg Siemens Verlagsbuchhandlung, Berlin.
Frequenz	*Frequenz.* Schiele & Schön, Leuschnerdamm 13, Berlin, S.O. 36.
Fuel	*Fuel.* Butterworths Scientific Publications, 436 Strand, London, W.C.2.
Funk-Praxis	*Funk-Praxis.* Stiftstrasse 15, Hamburg 1.
Funk u. Ton	*Funk und Ton.* Verlag für Radio-Foto-Kinotechnik, Eichborndamm 141/167, Berlin-Borsigwalde.
G.E.C. J.	*G.E.C. Journal.* General Electric Co., Magnet House, Kingsway. London, W.C.2.
G.E.C. Telecommun.	*G.E.C. Telecommunications.* General Electric Co., Telephone Works, Coventry.
Gas Wld	*Gas World.* [Abstracted by *Fuel Abstracts.*]
Gaz. Mat.	*Gazeta de Matemática.* Rua Serpa Pinto 17, Lisbon.
**Gazz. Chim. Ital.*	*Gazzetta Chimica Italiana.* Via IV Novembre 154, Rome.
Gen. Elect. Rev.	*General Electric Review.* General Electric Co., Schenectady, New York; Crown House, Aldwych, London, W.C.2.
Gen. Radio Exp.	*General Radio Experimenter.* Cambridge, Massachusetts.
Geofis. Pura Appl.	*Geofisica Pura e Applicata.* Istituto Geofisica Italiano, Casella Postale 3689, Milan-Ferrovia.
Geofys. Publ.	*Geofysiske Publikationer.* Norske Meteorologiske Institut, Oslo.
Geophysics	*Geophysics.* Society of Exploration Geophysicists, 817 South Boulder, Box 1614, Tulsa 1, Oklahoma.
Gidrotekh. Stroit.	*Gidrotekhnicheskoe Stroitelstvo.* Krasnaya Ploshchad, Gum, II Liniya, Pomeshchenie 165, Moscow.
Guide Russ. Sci. Period. Lit.	*Guide to Russian Scientific Periodical Literature.* Brookhaven National Laboratory, Upton, Long Island, New York.
Handb. U.S. Bur. Stand.	*Handbook of the National Bureau of Standards.* U.S. Government Printing Office, Washington.
Helv. Phys. Acta	*Helvetica Physica Acta.* E. Birkhäuser, Elisabethenstrasse 15, Basle.
Houille Blanche	*La Houille Blanche.* Rue Paul-Verlaine, Grenoble (Isère).
**Hrvatsko Prirodoslovno Društvo. Glasnik Mat.-Fis. Astr. Ser. II*	*Hrvatsko Prirodoslovno Društvo. Glasnik Matematičko-Fizički i Astronomski.* Periodicum Mathematico-Physicum et Astronomicum. Societas Scientiarum Naturalium Croatica. [Abstracted by *Mathematical Reviews.*]

Hungar. Acta Phys.	*Hungarica Acta Physica.* Hungarian Academy of Sciences, Akadémia-utca 2, Budapest V.
Illum. Engng, N.Y.	*Illuminating Engineering.* Mt. Royal and Guilford Avenues, Baltimore, Maryland.
Ind. Ital. Elettrotec.	*Industria Italiana Elettrotecnica.* Via Revere 14, Milan.
**Ind. Plast.*	*Industrie Plastique.* [Abstracted by *British Abstracts.*]
Indian J. Phys.	*Indian Journal of Physics (and Proceedings of the Indian Association for the Cultivation of Science).* 210 Bowbazar Street, Calcutta.
Industr. Diamond Rev.	*Industrial Diamond Review.* 226 Latymer Court, Hammersmith, London, W.6.
Industr. Engng Chem.	*Industrial and Engineering Chemistry.* American Chemical Society, 20th and Northampton Street, Easton, Pennsylvania.
Ing. Ferroviaria	*Ingegneria Ferroviaria. Rivista dei Trasporti.* Presso Direzione Generale delle F.S., Piazza Croce Rossa, Rome.
Ingenieur	*De Ingenieur.* Koninklijk Instituut van Ingenieurs, 23 Prinsessegracht, The Hague.
Ingeniøren	*Ingeniøren.* Dansk Ingeniørforening. 29 Vester Farimagsgade, Copenhagen V.
IngenVetensAkad. Handl.	*Ingeniörsvetenskapsakademien Handlingar.* Grevturegatan 14, Stockholm 1.
IngenVetensAkad. Medd.	*Ingeniörsvetenskapsakademien Meddelanden.* Grevturegatan 14, Stockholm 1.
IngenVidensk. Skr.	*Ingeniørvidenskabelige Skrifter.* Akademiet for de Tekniske Videnskaber. Østervoldgade 10, Copenhagen K.
Inst. Petrol. Rev.	*Institute of Petroleum Review.* Manson House, 26 Portland Place, London, W.1.
Inst. Roy. Met. Belg. Mém.	*Institut Royal Météorologique de Belgique. Mémoires.* 3 Avenue Circulaire, Uccle III, Belgium.
Inst. Roy. Met. Belg. Misc.	*Institut Royal Météorologique de Belgique. Miscellanées.* 3 Avenue Circulaire, Uccle III, Belgium.
**Instrum. Pract.*	*Instrument Practice.* United Trade Press Ltd., Bridge Lane, Fleet Street, London, E.C.4.
Instrumentation	*Instrumentation.* Minneapolis-Honeywell Regulator Co., Brown Instruments Division, Wayne & Roberts Avenue, Philadelphia 44, Pennsylvania.
**Instruments*	*Instruments.* Instruments Publishing Co., 921 Ridge Avenue, Pittsburgh 12, Pennsylvania.
**Iron and Steel*	*Iron and Steel.* Dorset House, Stamford Street, London, S.E.1.
**Iron Steel Engr.*	*Iron and Steel Engineer.* Association of Iron and Steel Engineers, 1010 Empire Building, Pittsburgh 22, Pennsylvania.
Ipad	*Industrial Progress and Development.* Builder Publishing Company, First Floor, Steamship Buildings, 17 Currie Street, Adelaide.
IVA, Stockholm	*IVA. Tidskrift för Teknisk-Vetenskaplig Forskning.* IngeniörsVetenskaps-Akademien, Stockholm 5.
Izv. Akad. Nauk, SSSR, Otdel. Tekn. Nauk	*Izvestiya Akademii Nauk, SSSR. Otdelenie Tekhnicheskikh Nauk.* Cherkasski Per 2, Moscow.
Izv. Akad. Nauk, SSSR, Ser. Fiz.	*Izvestiya Akademii Nauk, SSSR. Seriya Fizicheskaya.* Cherkasski Per 2, Moscow.
J. Acoust. Soc. Amer.	*Journal of the Acoustical Society of America.* American Institute of Physics, 57 East 55th Street, New York 22.
**J. Aero. Sci.*	*Journal of the Aeronautical Sciences.* 2 East 64th Street, New York 21, New York.
**J. Amer. Ceram. Soc.*	*Journal of the American Ceramic Society.* 2525 North High Street, Columbus 2, Ohio.
J. Amer. Chem. Soc.	*Journal of the American Chemical Society.* 1155 16th Street N.W., Washington 6.
J. Appl. Mech.	*Journal of Applied Mechanics.* American Society of Mechanical Engineers, 29 West 39th Street, New York.
J. Appl. Phys.	*Journal of Applied Physics.* American Institute of Physics, 57 East 55th Street, New York 22.
J. Brit. Astr. Ass.	*Journal of the British Astronomical Association.* 303 Bath Road, Hounslow West, Middlesex.
J. Brit. Instn Radio Engrs	*Journal of the British Institution of Radio Engineers.* 9 Bedford Square, London, W.C.1.
J. Brit. Interplan. Soc.	*Journal of the British Interplanetary Society.* 157 Friary Road, London, S.E.15.
J. Chem. Phys.	*Journal of Chemical Physics.* American Institute of Physics, 57 East 55th Street, New York 22.
J. Chem. Soc.	*Journal of the Chemical Society.* Burlington House, Piccadilly, London, W.1.
**J. Chim. Phys.*	*Journal de Chimie Physique.* Institut de Chimie, 11 rue Pierre Curie, Paris (V^e^).
J. Coun. Sci. Industr. Res., Aust.	*Journal of the Council for Scientific and Industrial Research, Australia.* 314 Albert Street, East Melbourne, C.2, Victoria.
J. Electrochem. Soc.	*Journal of the Electrochemical Society.* 235 West 102nd Street, New York 25.
J. Electrodepos. Tech. Soc.	*Journal of the Electrodepositors' Technical Society.* 27 Islington High Street, London, N.1.
J. Exp. Theor. Phys., USSR	*Journal of Experimental and Theoretical Physics.* Academy of Sciences of the U.S.S.R., Leningrad and Moscow.

**J. Fac. Sci. Hokkaido Univ.*	*Journal of the Faculty of Science.* Hokkaido University, Sapporo, Japan.
J. Franklin Inst.	*Journal of the Franklin Institute.* Prince and Lemon Streets, Lancaster, Pennsylvania.
**J. Geol., Chicago*	*Journal of Geology.* University of Chicago Press, 5750 Ellis Avenue, Chicago.
J. Geophys. Res.	*Journal of Geophysical Research.* [Formerly *Terr. Magn. Atmos. Elect.*] Johns Hopkins Press, Baltimore 18, Maryland.
J. Indian Inst. Sci.	*Journal of the Indian Institute of Sciences.* Mysore Press, Bangalore Road, Mysore City.
**J. Industr. Hyg. Toxicol.*	*Journal of Industrial Hygiene and Toxicology.* Williams & Wilkins Co., Baltimore 2, Maryland.
J. Inst. Fuel	*Journal of the Institute of Fuel.* 18 Devonshire Street, London, W.1.
J. Inst. Met.	*Journal of the Institute of Metals.* 4 Grosvenor Gardens, London, S.W.1.
**J. Inst. Navig.*	*Journal of the Institute of Navigation.* Royal Geographic Society, 1 Kensington Gore, London, S.W.7.
J. Inst. Petrol.	*Journal of the Institute of Petroleum.* Manson House, 26 Portland Place, London, W.1.
J. Instn Civ. Engrs	*Journal of the Institution of Civil Engineers.* Great George Street, London, S.W.1.
J. Instn Elect. Engrs	*Journal of the Institution of Electrical Engineers.* [See also *Proc. Instn Elect. Engrs.*]
**J. Instn Elect. Engrs Japan*	*Journal of the Institution of Electrical Engineers of Japan.* Denki Gakkai Zasschi 3, 1-chome, Ymaku-cho, Chiyoda-ku, Tokyo.
J. Instn Engrs, Aust.	*Journal of the Institution of Engineers, Australia.* Science House, Gloucester and Essex Streets, Sydney.
J. Iron Steel Inst.	*Journal of the Iron and Steel Institute.* 4 Grosvenor Gardens, London, S.W.1.
J. Jr Instn Engrs	*Journal of the Junior Institution of Engineers.* 39 Victoria Street, London, S.W.1.
**J. Mar. Res.*	*Journal of Marine Research.* Sears Foundation for Marine Research, Bingham Oceanographic Laboratory, Yale University, New Haven, Connecticut.
J. Math. Phys.	*Journal of Mathematics and Physics.* Massachusetts Institute of Technology, Cambridge 39, Massachusetts.
J. Met.	*Journal of Meteorology.* American Meteorological Society. Prince and Lemon Streets, Lancaster, Pennsylvania.
J. Opt. Soc. Amer.	*Journal of the Optical Society of America.* American Institute of Physics, 57 East 55th Street, New York 22.
**J. Phys. Chem. USSR*	*Journal of Physical Chemistry USSR.* [Abstracted by *British Abstracts.*]
J. Phys. Coll. Chem.	*Journal of Physical and Colloid Chemistry.* Williams & Wilkins Company, Baltimore 2, Maryland.
J. Phys. Radium	*Journal de Physique et le Radium.* 10 rue Vauquelin, Paris (V^e).
J. Phys. Soc. Japan	*Journal of the Physical Society of Japan.* University of Tokyo.
J. Proc. Roy Soc. N.S.W.	*Journal and Proceedings of the Royal Society of New South Wales.* Science House, Gloucester and Essex Streets, Sydney.
J. Rech. Cent. Nat. Rech. Sci.	*Journal des Recherches du Centre National de la Recherche Scientifique.* 13 Quai Anatole-France, Paris (VII^e).
J. Res. Nat. Bur. Stand., Wash.	*Journal of Research of the National Bureau of Standards.* U.S. Government Printing Office, Washington 25, D.C.
**J. Roy. Aero. Soc.*	*Journal of the Royal Aeronautical Society.* 4 Hamilton Place, Piccadilly, London, W.1.
J. Roy. Astr. Soc. Can.	*Journal of the Royal Astronomical Society of Canada.* 3 Willcocks Street, Toronto.
**J. Roy. Inst. Brit. Archit.*	*Journal of the Royal Institute of British Architects.* 66 Portland Place, London, W.1.
J. Roy. Soc. Arts	*Journal of the Royal Society of Arts.* 6–8 John Adam Street, London, W.C.2.
**J. Roy. Statist. Soc. Ser. A.*	*Journal of the Royal Statistical Society, Series A.* [Abstracted by *Mathematical Reviews.*]
**J. Sci. Hirosima Univ.*	*Journal of Science of Hirosima University.* [Abstracted by *Mathematical Reviews.*]
J. Sci. Industr. Res.	*Journal of Scientific and Industrial Research.* "P" Block, Raisina Road, New Delhi 3.
J. Sci. Instrum.	*Journal of Scientific Instruments.* [Formerly *J. Sci. Instrum. Phys. Ind.*] Institute of Physics, 47 Belgrave Square, London, S.W.1.
J. Sci. Res. Inst., Tokyo	*Journal of the Scientific Research Institute.* Komagome, Bunkyo-ku, Tokyo.
J. Soc. Appl. Mech. Japan	*Journal of the Society of Applied Mechanics of Japan.* Nikokan, 3 1-chome Tamura-cho, Shiba, Minato-ku, Tokyo.
J. Soc. Dy. Col., Bradford	*Journal of the Society of Dyers and Colourists.* 32–4 Piccadilly, Bradford.
J. Soc. Glass Techn.	*Journal of the Society of Glass Technology.* "Elmfield," Northumberland Road, Sheffield 10.
J. Soc. Mot. Pict. Engrs	*Journal of the Society of Motion Picture Engineers.* 20th and Northampton Street, Easton, Pennsylvania.
J. Tech. Phys., USSR	*Journal of Technical Physics.* Doroga V Sosnovku 2, Leningrad 21.
J. Télécommun.	*Journal des Télécommunications.* Effingerstrasse 1, Berne.
J. Televis. Soc.	*Journal of the Television Society.* 68 Compton Road, London, N.21.
J. Text. Inst., Manchr	*Journal of the Textile Institute.* St. Mary's Parsonage, Manchester.
J. Univ. Bombay	*Journal of the University of Bombay.* Bombay.
J. Wash. Acad. Sci.	*Journal of the Washington Academy of Sciences.* U.S. National Museum, Washington 25, D.C.
**Jernkontor. Ann.*	*Jernkontorets Annaler.* Kungsträdgårdsgatan, Stockholm C.

JIOA Rep.	*Joint Intelligence Objectives Agencies.* H.M. Stationery Office, Kingsway, London, W.C.2.
Jordbruk. Elekt. Bl. [*JOEL*]	*JOEL. Jordbrukarens Elektriska Blad.* Föreningen för Elektricitetens Rationella Användning (FERA), Box 3222, Stockholm 3.
K. Danske Vidensk. Selsk. Mat.-fys. Medd.	*Det Kgl. Danske Videnskabers Selskab. Matematisk-fysiske Meddelelser.* Dantes Plads 35, Copenhagen V.
K. Fysiogr. Sällsk. Lund, Förh.	*Kungliga Fysiografiska Sällskapets i Lund Förhandlingar.* Lund.
K. Norske Vidensk. Selsk. Forh.	*Det Kongelige Norske Videnskabers Selskabs Forhandlinger.* F. Bruns Bokhandel, Trondhjem.
K. Norske Vidensk. Selsk. Skr.	*Det Kongelige Norske Videnskabers Selskabs Skrifter.* F. Bruns Bokhandel, Trondhjem.
K. Tekn. Högsk. Handl.	*Kungliga Tekniska Högskolans Handlingar.* [See *Trans. Roy. Inst. Techn., Stockholm.*]
**King's Coll. Min. Bull.*	*King's College Mining Bulletin.* King's College, Newcastle upon Tyne, Northumberland.
**Kotloturbostroenie*	Gozenergoizdat, Shlyuzovaya, Naberezhnaya 10, Moscow.
Kraft o. Ljus	*Kraft och Ljus.* Ehrensvärdsvägen 10, Helsinki.
**Kwart. Telekomun.*	*Kwartalnik Telekomunikacyjny.* Zaklad Radiotechniki Politechniki Warszawskiej, Warsaw.
**Lancet*	*Lancet.* 7 John Adam Street, London, W.C.2.
Leafl. Astr. Soc. Pacif.	*Leaflet of the Astronomical Society of the Pacific.* Palo Alto, California.
Lick Obs. Bull.	*Lick Observatory Bulletin.* University of California, Berkeley.
Light and Ltg	*Light and Lighting.* 32 Victoria Street, London, S.W.1.
Lunds Univ. Årsskr. Avd. 2	*Lunds Universetets Årsskrift, Avd.* 2. Lund.
Magyar Tech.	*Magyar Technika.* Szalay-utca 4, Budapest V.
Marconi Instrum.	*Marconi Instrumentation.* Marconi Instruments, St. Albans, Hertfordshire.
**Marconi Rev.*	*Marconi Review.* Marconi Instruments, St. Albans, Hertfordshire.
Maschinenb. u. Wärmewirtsch. [*MuW*]	*Maschinenbau und Wärmewirtschaft mit Lokomotiv- und Fahrzeugbau.* Springer-Verlag, Mölkerbastei 5, Vienna I.
**Mater. and Meth.*	*Materials and Methods.* 330 West 42nd Street, New York 18.
**Math. Nachr.*	*Mathematische Nachrichten.* Akademie-Verlag, Schiffbauerbamm 19, Berlin, N.W.7.
Math. Tables Aids Comput.	*Mathematical Tables and Other Aids to Computation.* National Academy of Sciences, 2101 Constitution Avenue, Washington, D.C.
Mech. Engng, N.Y.	*Mechanical Engineering.* American Society of Mechanical Engineers, 20th and Northampton Street, Easton, Pennsylvania.
**Med. K. Vlaamse Acad. Wetensch.*	*Mededelingen van de Koninklijke Vlaamse Academie voor Wetenschappen.* Paleis der Academien, Hertogelijke Straat 1, Brussels.
**Medd. Lunds Astr. Obs.*	*Meddelanden från Lunds Astronomiska Observatorium.* Lund.
Medd. Stat. Tekn. ForsknAnstalt.	*Statens Tekniska Forskningsanstalt Meddelande.* [See under *Tied. Valt. Tekn. Tutkimuslaitos.*]
Mém. Acad. Roy. Belg. Cl. Sci.	*Mémoires de la Classe des Sciences de l'Académie Royale de Belgique.* Palais des Académies, Rue Ducale 1, Brussels.
Mem. Accad. Naz. Lincei	*Memorie dell' Accademia Nazionale dei Lincei.* [See *Atti Accad. Naz. Lincei* (*Mem. Cl. Sci. Fis. Mat. Nat.*)]
Mem. Coll. Sci., Univ. Kyoto	*Memoirs of the College of Science, University of Kyoto, Series A.* Kyoto.
**Mem. Fac. Engng Hokkaido Univ.*	*Memoirs of the Faculty of Engineering, Hokkaido University.* Sapporo.
Mem. Fac. Engng Kyushu Univ.	*Memoirs of the Faculty of Engineering, Kyushu University.* Fukuoka.
Mem. India Met. Dep.	*Memoirs of the India Meteorological Department.* Delhi.
Mem. Manchr Lit. Phil. Soc.	*Memoirs and Proceedings of the Manchester Literary and Philosophical Society.* Manchester 2.
Mem. Soc. Astr. Ital.	*Memorie della Società Astronomica Italiana.* Via Brera 28, Milan.
Mém. Soc. Roy. Belge Industr.	*Mémoires de la Société Royale Belge des Ingénieurs et des Industriels.* 3 Rue Ravenstein, Brussels.
Met. Ann.	*Meteorologiske Annaler.* Norske Meteorologiske Institut, Oslo.
**Met. Rdsch.*	*Meteorologische Rundschau.* [Abstracted by *Applied Mechanics Reviews.*]
**Metal Progr.*	*Metal Progress.* 7301 Euclid Avenue, Cleveland, Ohio.
**Metal Treatm.*	*Metal Treatment and Drop Forging.* Industrial Newspapers Ltd., 49 Wellington Street, Strand, London, W.C.2.
**Metallforsch.*	*Metallforschung.* Paulinenstrasse 37B, Stuttgart, W.
**Metallurgia, Manchr*	*Metallurgia.* Kennedy Press Ltd., 31 King Street West, Manchester 3.
Metrop.-Vick. Gaz.	*Metropolitan-Vickers Gazette.* Metropolitan-Vickers Electrical Co., Trafford Park, Manchester 17.
**Microtecnic*	*Microtecnic.* 23 Avenue de la Gare, Lausanne.
Min. Elect. Mech. Engr	*Mining Electrical and Mechanical Engineer.* Cromwell Buildings, Blackfriars Street, Manchester 3.
Min. Mag.	*Mines Magazine.* 734 Cooper Bldg., Denver, Colorado.
Misc. Publ. Nat. Bur. Stand., Wash.	*Miscellaneous Publications of the National Bureau of Standards.* U.S. Government Printing Office, Washington 25, D.C.
**Mitt. Geodät. Inst. E.T.H., Zürich*	*Mitteilungen aus dem Geodätischen Institut, Eidgenössische Technische Hochschule.* Clausiusstrasse 3, Zürich.
**Mitt. Inst. Aerodyn. E.T.H., Zürich*	*Mitteilungen aus dem Institut für Aerodynamik, Eidgenössische Technische Hochschule.* Clausiusstrasse 3, Zürich.
**Mitt. Inst. Geophys. E.T.H., Zürich*	*Mitteilungen aus dem Institut für Geophysik, Eidgenössische Technische Hochschule.* Clausiusstrasse 3, Zürich.

Mon. Not. Roy. Astr. Soc.	*Monthly Notices of the Royal Astronomical Society.* Burlington House, London, W.1.
Mon. Not. Roy. Astr. Soc., Geophys. Suppl.	*Monthly Notices of the Royal Astronomical Society. Geophysical Supplement.* Burlington House, London, W.1.
**Monatsh. Math.*	*Monatshefte für Mathematik.* [Abstracted by *Mathematical Reviews.*]
Muirhead Tech.	*Muirhead Technique.* Muirhead & Co. Ltd., Beckenham, Kent.
Murex Rev.	*Murex Review.* Murex Ltd., Rainham, Essex.
N.Z. J. Sci. Tech.	*New Zealand Journal of Science and Technology.* Department of Scientific and Industrial Research, Wellington.
Nachr. Wiss. Göttingen	*Nachrichten von der Gesellschaft der Wissenschaften zu Göttingen.* Göttingen.
Nat. Bur. Stand., Appl. Math. Ser.	*National Bureau of Standards, Applied Mathematics Series.* U.S. Government Printing Office, Washington 25, D.C.
Nat. Res. Coun. Can., Publ.	*National Research Council of Canada, Publications.* The National Research Council of Canada, Ottawa.
Nature, Lond.	*Nature.* McMillan, St. Martin's Street, London, W.C.2.
Naturwissenschaften	*Die Naturwissenschaften.* Springer-Verlag, Jebenstrasse 1, Berlin-Charlottenburg 2.
Ned. T. Natuurkde	*Nederlands Tijdschrift voor Natuurkunde.* Nederlandse Natuurkundige Vereeniging, Physisch Laboratorium, Bijhouwerstraat 6, Utrecht.
Non-Destr. Test.	*Non-Destructive Testing.* American Industrial Radium and X-Ray Society, 53 West Jackson Boulevard, Chicago 4.
Nucleonics	*Nucleonics.* McGraw-Hill Publishing Co., 330 W 42nd Street, New York, New York; Aldwych House, London, W.C.2.
Nuovo Cim.	*Nuovo Cimento.* Istituto di Fisica della Università, Via Irnerio 46, Bologna.
Observatory	*Observatory.* Royal Observatory, Greenwich, London, S.E.10.
Occ. Not. Roy. Astr. Soc.	*Occasional Notices of the Royal Astronomical Society.* Burlington House, London, W.1.
Onde Elect.	*Onde Electrique.* Société des Radioélectriciens, 14 Avenue Pierre-Larousse, Malakoff (Seine).
Optik	*Optik.* Wissenschaftliche Verlagsgesellschaft, Stuttgart.
Ossvz. Mem. Oss. Astr. Arcetri	*Osservazioni e Memorie dell'Osservatorio Astrofisico di Arcetri.* Florence.
**Öst. Chem. Ztg*	*Österreichische Chemiker Zeitung.* Springer-Verlag, Mölkerbastei 5, Vienna I.
Öst. Ingen. Arch.	*Österreichisches Ingenieur Archiv.* Springer-Verlag, Mölkerbastei 5, Vienna I.
Öst. Z. Elektrizitätswirtsch. [*ÖZE*]	*Österreichische Zeitschrift für Elektrizitätswirtschaft.* Springer-Verlag, Mölkerbastei 5, Vienna I.
Öst. Z. Telegr.-Teleph.-Funk-Fernsehtech. [*ÖTF*]	*Österreichische Zeitschrift für Telegraphen-, Telephon-, Funk- und Fernsehtechnik.* Springer-Verlag, Mölkerbastei 5, Vienna I.
P.O. Elect. Engrs' J.	*The Post Office Electrical Engineers' Journal.* Engineer-in-Chief's Office, Alder House, Aldersgate Street, London, E.C.1.
Pap. Instn Post Off. Elect. Engrs	*The Institution of Post Office Electrical Engineers, Printed Papers.* Alder House, Aldersgate Street, London, E.C.1.
Pap. Phys. Oceanogr. Met.	*Papers in Physical Oceanography and Meteorology.* Cambridge and Woods Hole, Massachusetts.
**Petroleum*	*Petroleum.* Leonard Hill Technical Group, 17 Stratford Place, London, W.1.
Phil. Mag.	*The Philosophical Magazine.* Taylor & Francis, Red Lion Court, Fleet Street, London, E.C.4.
Philips Res. Rep.	*Philips Research Reports.* Century House, Shaftesbury Avenue, London, W.C.2; Philips' Gloeilampenfabrieken, Eindhoven.
Philips Tech. Rev.	*Philips Technical Review.* Century House, Shaftesbury Avenue, London, W.C.2; Philips' Gloeilampenfabrieken, Eindhoven.
Philos. Trans. A	*Philosophical Transactions of the Royal Society of London, Series A.* Burlington House, London, W.1.
Photogr. J.	*Photographic Journal.* Royal Photographic Society of Great Britain, 16 Princes Gate, London, S.W.7.
Phys. Bl.	*Physikalische Blätter.* Physik Verlag, Renzstrasse 3, Mosbach/Baden.
Phys. Rev.	*The Physical Review.* American Institute of Physics. 57 East 55th Street, New York 22.
Physica	*Physica.* Martinus Nijhoff, The Hague.
Physics Today	*Physics Today.* American Institute of Physics, 57 East 55th Street, New York 22.
Portugal. Math.	*Portugaliae Mathematica.* Rua Serpa Pinto 17, Lisbon.
Portugal. Phys.	*Portugaliae Physica.* Laboratorio de Fisica, Faculdade de Ciências, Rua da Escola Politécnica, Lisbon.
Poste e Telecomun.	*Poste e Telecomunicazioni.* Viale Trastevere 189, Rome.
**Powder Metall. Bull.*	*Powder Metallurgy Bulletin.* 320 Yonkers Avenue, Yonkers 2, New York.
**Power*	*Power.* McGraw-Hill Publishing Co., 330 West 42nd Street, New York; Aldwych House, London, W.C.2.
Prak. Wiss.	*Praktisches Wissen.* Verlag "Praktisches Wissen," Eggenberger Allee 89, Graz-Eggenberg.
Proc. Amer. Acad. Arts Sci.	*Proceedings of the American Academy of Arts and Sciences.* 28 Newbury Street, Boston, Mass.

Proc. Amer. Phil. Soc.	*Proceedings of the American Philosophical Society.* Independence Square, Philadelphia 6.
Proc. Camb. Phil. Soc.	*Proceedings of the Cambridge Philosophical Society.* Cambridge University Press, Bentley House, 200 Euston Road, London, N.W.1.
Proc. Indian Acad. Sci. A	*Proceedings of the Indian Academy of Sciences, Section A.* Bangalore City.
Proc. Inst. Radio Engrs	*Proceedings of the Institute of Radio Engineers.* 1 East 79th Street, New York 21.
Proc. Instn Elect. Engrs	*Proceedings of The Institution of Electrical Engineers.* Savoy Place, London, W.C.2.
Proc. Instn Mech. Engrs	*Proceedings of the Institution of Mechanical Engineers.* Storey's Gate, London, S.W.1.
Proc. Instn Radio Engrs, Aust.	*Proceedings of the Institution of Radio Engineers, Australia.* Science House, Essex and Gloucester Streets, Sydney.
Proc. K. Ned. Akad. Wet.	*Proceedings. Koninklijke Nederlandsche Akademie van Wetenschappen.* Trippenhuis, Amsterdam.
Proc. Leeds Phil. Lit. Soc.	*Proceedings of the Leeds Philosophical and Literary Society.* The University, Leeds.
Proc. Math. Phys. Soc. Egypt	*Proceedings of the Mathematical and Physical Society of Egypt.* Faculty of Science, Fouad I University, Abbassiah, Cairo.
Proc. Midwest Pwr Conf.	*Proceedings of the Midwest Power Conference.* Illinois Institute of Technology, 330 Federal Street, Chicago 16.
Proc. Nat. Acad. Sci., Wash.	*Proceedings of the National Academy of Sciences.* Constitution Avenue and 21st Street, Washington 25, D.C.
Proc. Nat. Inst. Sci. India	*Proceedings of the National Institute of Sciences of India.* University Buildings, Delhi.
Proc. Phys. Soc., Lond.	*Proceedings of the Physical Society.* 1 Lowther Gardens, Prince Consort Road, London, S.W.7.
**Proc. Pittsburgh Internat. Conf. Surface Reactions*	*Proceedings of the Pittsburgh International Conference on Surface Reactions.* Corrosion Publishing Co., 1131 Wolfendale Street, Pittsburgh.
Proc. Roy. Instn	*Proceedings of the Royal Institution of Great Britain.* Albemarle Street, London, W.1.
Proc. Roy. Irish Acad.	*Proceedings of the Royal Irish Academy.* Hodges, Figgis, 6 Dawson Street, Dublin; Williams & Norgate, 36 Great Russell Street, London, W.C.1.
Proc. Roy. Soc. A.	*Proceedings of the Royal Society of London, Series A.* Burlington House, London, W.1.
Proc. Roy. Soc. Edinb.	*Proceedings of the Royal Society of Edinburgh.* 22/24 George Street, Edinburgh.
Proc. Roy. Soc. Vict.	*Proceedings of the Royal Society of Victoria.* Victoria Street, Melbourne, C.1.
**Proc. Soc. Psych. Res.*	*Proceedings of the Society of Psychical Research.* 31, Tavistock Square, W.C.1.
**Proc. Univ. Durham Phil. Soc.*	*Proceedings of the University of Durham Philosophical Society.* Durham.
**Prod. Engng*	*Product Engineering.* McGraw-Hill Publishing Co., 330 West 42nd Street, New York 18.
Progr. Theor. Phys.	*Progress of Theoretical Physics.* Akitaya Co., Osaka, Kyoto.
Przegl. Elektrotech.	*Przeglad Elektrotechniczny.* al. Stalina 27, Warsaw.
PTT-Bedrijf	*Het PTT-Bedrijf.* Hoofdbestuur der Posterijen, Telegrafie en Telefonie, Javastraat 6, The Hague.
**Pubbl. Comm. Geod. Ital.*	*Pubblicazioni della Commissione Geodetica Italiana.* Via G. Pascoli 55, Milan.
Pubbl. Ist. Elettrotec. Naz. Galileo Ferraris	*Pubblicazioni dell' Istituto Elettrotecnico Nazionale Galileo Ferraris.* Corso Massimo d'Azeglio, Torino 116.
Pubbl. Ist. Naz. Elettroacust. O.M. Corbino	*Pubblicazioni del R. Istituto Nazionale di Elettroacustica O.M. Corbino.* Piazzale delle Scienze 7, Rome.
Publ. Astr. Soc. Pacif.	*Publications of the Astronomical Society of the Pacific.* Palo Alto, California.
Publ. Dom. Astrophys. Obs. Victoria, B.C.	*Publications of the Dominion Astrophysical Observatory.* Victoria, British Columbia.
Publ. Dom. Obs. Ottawa	*Publications of the Dominion Observatory.* Ottawa.
Publ. Fac. Cienc. Fis-Mat. La Plata	*Publicaciones de la Facultad de Ciencias Físico-Matemáticas de la Universidad Nacional de la Plata.* La Plata.
**Publ. Fac. Sci. Univ. Masaryk*	*Publications de la Faculté des Sciences de l'Université Masaryk.* A. Piša, Česká 28, Brno.
**Publ. Obs. Univ. Michigan*	*Publications of the University of Michigan.* Ann Arbor, Michigan.
**Publ. Sci. Min. Air France*	*Publications Scientifiques et Techniques du Ministère de l'Air.* Bulletin des Services Techniques et Notes Techniques, 2 Rue de la Porte d'Issy, Paris (XV^{e}).
Publ. State Inst. Tech. Res., Finland	*Publications of the State Institute for Technical Research, Finland.* Lonnrotink 37, Helsinki.
Publ. Univ. Tech. Sci., Budapest	*Publications of the University of Technical Sciences.* Budapest.
**Pwr Generation*	*Power Generation.* Technical Publications, 53 West Jackson Boulevard, Chicago 4.
Quad. Stud. e Not.	*Quaderni di Studi e Notizie.* Società Edison, Giunta Tecnica di Gruppo, Foro Bonaparte 31, Milan.
Quart. Appl. Math.	*Quarterly of Applied Mathematics.* Brown University, Providence, Rhode Island.
Quart. J. Mech. Appl. Math.	*Quarterly Journal of Mechanics and Applied Mathematics.* Oxford University Press, Amen House, London, E.C.4.
Quart. J. Roy. Met. Soc.	*Quarterly Journal of the Royal Meteorological Society.* 49 Cromwell Road, London, S.W.7.

R.C. Accad. Naz. Lincei	*Rendiconti dell' Accademia Nazionale dei Lincei.* [See *Atti Accad. Naz. Lincei* (*R.C. Cl. Sci. Fis. Mat. Nat*).]
R.C. Ist. Super. Sanità	*Rendiconti dell' Istituto Superiore di Sanità.* Viale Regina Margherita 299, Rome.
Radio-Electronic Engng	*Radio-Electronic Engineering.* [Published as a special edition in a limited number of copies of *Radio and Television News.*] Ziff-Davis Publishing Co., 185 N. Wabash Avenue, Chicago 1.
Radio Franç.	*La Radio Française.* 92 Rue Bonaparte, Paris (VI^{e}).
Radio Televis. News	*Radio and Television News.* Ziff-Davis Publishing Co., 185 N. Wabash Avenue, Chicago I.
Radiology	*Radiology.* 713 E. Genesee Street, Syracuse 2, New York.
Radiotekhnika	*Radiotekhnika.* ul. Kirova, 40, Moscow.
Radiotronics	*Radiotronics.* Amalgamated Wireless Valve Co., 47 York Street (G.P.O. Box 2516), Sydney.
RCA Rev.	*RCA Review.* Radio Corporation of America, RCA Laboratories Division, Princeton, New Jersey.
Rec. Trav. Chim. Pays-Bas	*Recueil des Travaux Chimiques des Pays-Bas.* Lange Voorhout 5, The Hague.
**Rech. Aéronaut.*	*La Recherche Aéronautique.* 3 rue Léon Bonnat, Paris XVI^{e}.
Rep. Brit. Elect. Res. Ass.	*Reports of the British Electrical and Allied Industries Research Association.* "Thorncroft," Dorking Road, Leatherhead.
**Rep. Invest. U.S. Bur. Min.*	*Reports of Investigations of the United States Bureau of Mines.* U.S. Government Printing Office, Washington, D.C.
Rep. Phys. Soc. Progr. Phys.	*Reports of the Physical Society on Progress in Physics.* 1 Lowther Gardens, Prince Consort Road, London, S.W.7.
Repr. Univ. Ill. Engng Exp. Sta.	*Reprint Series of the University of Illinois Engineering Experiment Station.* Urbana, Illinois.
Research, Lond.	*Research, London.* Butterworths Scientific Publications, 436 Strand, London, W.C.2.
**Rev. Alsthom.*	*Revue d'Electricité et de Mécanique.* Société Générale de Constructions Electriques et Mécaniques Alsthom, 38 Avenue Kléber, Paris.
Rev. Cienc. Apl.	*Revista de Ciencia Aplicada.* Alcalá 95, 1°, Madrid.
Rev. Electrotec., B. Aires	*Revista Electrotecnica.* Posadas 1657–59, Buenos Aires.
Rev. Gén. Elect.	*Revue Générale d'Electricité.* 12, Place Henri-Bergson, Paris (VIII^{e}).
Rev. Métall.	*Revue de Métallurgie.* 5 Cités. Pigalle, Paris (IX^{e}).
Rev. Mod. Phys.	*Reviews of Modern Physics.* American Institute of Physics, 57 East 55th Street, New York 22.
Rev. Obras Publ.	*Revista de Obras Publicas.* Alfonso XII, 3-Escuela de Caminos, Madrid.
Rev. Opt. (Théor. Instrum.)	*Revue Optique Théorique et Instrumentale.* 3 & 5 Boulevard Pasteur, Paris (XV^{e}).
**Rev. Ord. Engen.*	*Revista de Ordem dos Engenheiros.* Avenida de Antonio Augusto de Aguiar No. 1, Lisbon.
**Rev. Real Acad. Cienc. Madrid*	*Revista de la Real Academia de Ciencias de Madrid.* Madrid.
Rev. Sci. Instrum.	*Review of Scientific Instruments.* American Institute of Physics, 57 East 55th Street, New York 22.
Rev. Sci., Paris	*La Revue Scientifique.* 4 rue Pomereu, Paris (XVI^{e}).
Rev. Stiint.	*Revista Stiintifica "V. Adamachi."* Laboratorul de Chimie Organica, The University, Jassy.
Rev. Tech. C.F.T.H.	*Revue Technique Compagnie Française Thomson-Houston.* 173 Boulevard Haussmann, Paris (VIII^{e}).
**Rev. Un. Mat. Argentina*	*Revista de la Unión Matemática Argentina* [Abstracted by *Mathematical Reviews.*]
**Rev. Univ. Nac. Tucuman*	*Revista de la Universidad Nacional de Tucumán.* Tucumán, Argentine.
Reyrolle Rev. Repr.	*Reyrolle Review Reprints.* A. Reyrolle & Co., Hebburn, Co. Durham.
Ric. Sci.	*Ricerca Scientifica.* Consiglio Nazionale delle Ricerche, Piazzale delle Scienze 7, Rome.
Riv. Nuovo Cim.	*La Rivista del Nuovo Cimento.* Istituto di Fisica della Università, Via Irnerio 46, Bologna.
**Rly Gaz., Lond.*	*Railway Gazette.* 33 Tothill Street, London, S.W.1.
**Rly Mech. Engr*	*Railway Mechanical Engineer.* Simmons-Boardman Publishing Co., 30 Church Street, New York 7.
**Rly Signaling*	*Railway Signaling.* Simmons-Boardman Publishing Co., 30 Church Street, New York 7.
S. Afr. J. Sci.	*South African Journal of Science.* South African Association for the Advancement of Science, P.O. 6894, Johannesburg.
S.B. Heidelberg Akad. Wiss. (Math.-Naturwiss. Kl.)	*Sitzungsberichte der Heidelberger Akademie der Wissenschaften.* (*Mathematisch-Naturwissenschaftliche Klasse*). Physikalisches Institut der Universität Heidelberg, Albert Uberlestrasse 3, Heidelberg.
S.B. Ost. Akad. Wiss., Abt. IIa	*Sitzungsberichte der Österreichischen Akademie der Wissenschaften, Abteilung IIa.* Springer-Verlag, Mölkerbastei 5, Vienna I.
Schweiz. Arch. angew. Wiss. Tech.	*Schweizer Archiv für angewandte Wissenschaft und Technik.* Buchdruckerei Vogt-Schild, Solothurn.
Schweiz. Bauztg	*Schweizerische Bauzeitung.* W. Jegher & A. Ostertag, Dianastrasse 5, Zürich.
Sci. Not. India Met. Dep.	*Scientific Notes of the India Meteorological Department.* Delhi.
Sci. Proc. Roy. Dublin Soc.	*Scientific Proceedings of the Royal Dublin Society.* Ballsbridge, Dublin.
Sci. Progr.	*Science Progress.* Edward Arnold, 41 Maddox Street, London, W.1.
**Sci. Rec., Shanghai*	*Science Record.* Academia Sinica, Shanghai.
Sci. Rep. Nat. Tsing Hua Univ.	*Science Reports of the National Tsing Hua University.* Peiping.
**Sci. Rep. Tohoku Imp. Univ.*	*Science Reports of Tohoku Imperial University, First Series* (*Mathematics, Physics, Chemistry.*) [Abstracted by *Mathematical Reviews.*]

**Sci. Stud., St. Bonaventure Coll.*	*Scientific Studies, St. Bonaventure College.* [Abstracted by *British Abstracts.*]
Science	*Science.* American Association for the Advancement of Science, 1515 Massachusetts Avenue N.W., Washington 5, D.C.
Siemens Austria Z.	*Siemens Austria Zeitschrift.* Siemens u. Halske, 12 Apostelgasse, Vienna 3.
Sky and Telescope	*Sky and Telescope.* Sky Publishing Co. Harvard College Observatory, Cambridge 38, Massachusetts.
Slabopr. Obz.	*Slaboproudy Obzor.* Vocelova 3, Prague XII.
Smit Med.	*Smit Mededelingen.* Willem Smit & Co.'s Transformatorenfabriek, Nijmegen.
Spectrochim. Acta	*Spectrochimica Acta.* Specola Vaticana, Vatican City; Springer-Verlag, Heidelberg—Göttingen—Berlin.
**Steel*	*Steel.* Penton Publishing Co., Penton Building, Cleveland 13, Ohio.
Stockholms Obs Ann.	*Stockholms Observatoriums Annaler.* Almquist & Wiksells Boktryckeri, A.B., Stockholm.
Strowger J.	*Strowger Journal.* Automatic Telephone and Electric Co., Strowger Works, Liverpool 7.
**Sulzer Tech Rev.*	*Sulzer Technical Review.* Sulzer Bros., 31 Bedford Square, London, W.C.1.
**Summa Brasil. Math.*	*Summa Brasiliensis Mathematicae.* [Abstracted by *Mathematical Reviews.*]
Svenska Elverksfören. Handl.	*Svenska Elverksföreningens Handlingar.* Drottninggatan 90B, Stockholm.
Svenska VattenkrFören. Publ.	*Svenska Vattenkraftföreningens Publikationer.* Norrlandsgatan 16, Stockholm.
**Swiss Tech.*	*Swiss Technics.* Swiss Office for the Development of Trade, Pl. Riponne 3, Lausanne.
Sylv. Techn.	*Sylvania Technologist.* Sylvania Electric Products, 40–22 Lawrence Street, Flushing, New York.
**Tech. Mitt. Schweiz. Post-Telegr.-Teleph-Verw.*	*Technische Mitteilungen von der Schweizerischen Post-Telegraphen- und Telephonverwaltung.* Berne.
Tech. Mod.	*La Technique Moderne.* 92 Rue Bonaparte, Paris (6e).
Tech. Pap. U.S. Bur. Min.	*Technical Papers of the United States Bureau of Mines.* U.S. Government Printing Office, Washington 25, D.C.
Tech. Rep. Res. Lab. Electronics Mass. Inst. Techn.	*Research Laboratory of Electronics, Technical Reports.* Massachusetts Institute of Technology, Boston 39, Massachusetts.
Tech. u. Wiss.	*Technik und Wissenschaft.* Nikolaistr. 7, Flensburg.
Technik	*Die Technik.* Verlag Technik, Dorotheenstrasse 41, Berlin, N.W.7.
Tecn. Ital.	*Tecnica Italiana.* Via Beccaria 6, Trieste.
Técnica, Lisbon	*Técnica.* Instituto Superior Técnico, Av. Rovisco Pais, Lisbon-N.
Tekh. Khron.	*Tekhnika Khronika.* Technical Chamber of Greece, 4, Kolokotroni St., Athens.
Tekn. Medd. K. TelegrStyr., Stockholm	*Tekniska Meddelanden från Kungl. Telegrafstyrelsen.* [See *Tele.*]
Tekn. Medd. TelegrStyr., Oslo	*Tekniske Meddelelser fra Telegrafstyret.* Direction Générale des Télécommunications de Norvège, Oslo.
Tekn. Tidskr.	*Teknisk Tidskrift.* Kungsgatan 37, Stockholm C.
Tekn. Ukebl.	*Teknisk Ukeblad.* Norske Ingeniørforening, Kronprinsengate 17, Oslo 9.
Tele	*Tele.* Meddelanden från Kungl. Telegrafstyrelsen. Stockholm. [Formerly *Tekn. Medd K. Telegrstyr.*]
Telecommun. J. Aust.	*The Telecommunications Journal of Australia.* Postal Electrical Society of Victoria, G.P.O. Box 4050, Melbourne.
Telecomun.	*Telecomunicazioni.* [Published with *Rassegna Poste e Telecomunicazioni.*] Viale Trastevere 189, Rome.
Televis. Engng	*Television Engineering* [Formerly *Communications*]. Bryan Davis Publishing Co., 52 Vanderbilt Avenue, New York 17.
Tellus	*Tellus. A Quarterly Journal of Geophysics.* Svenska Geofysiska Föreningen. Fridhemsgatan 9, Stockholm 12. Vol. 1, No. 1, is dated Feb., 1949.
Terr. Magn. Atmos. Elect.	*Terrestrial Magnetism and Atmospheric Electricity.* Johns Hopkins Press Baltimore 18, Maryland.
**Text. Res. J.*	*Textile Research Journal.* 10 East 40th Street, New York 16.
**Text. Weekly*	*Textile Weekly.* Textile Press Ltd., 33 Blackfriars Street, Manchester 3.
Tidskr. Ljuskultur	*Tidskrift för Ljuskultur.* Svenska Föreningen för Ljuskultur. Sveavägen 28–30, Stockholm.
Tied. Valt. Tekn. Tutkimuslaitos	*Valtion Teknillinen Tutkimuslaitos. Tiedoitus.* Helsinki.
Tijdschr. Ned. Radiogenoot.	*Tijdschrift van het Nederlandsch Radiogenootschap.* Oude Outrechtschewe 8, Baarn.
Tôhoku Math. J.	*Tôhoku Mathematical Journal.* Tôhoku Printing Co. Ltd., Sendai Japan.
Trans. Amer. Geophys. Un.	*Transactions of the American Geophysical Union.* Administration Building Carnegie Institution of Washington, D.C., 1530 P Street Northwest Washington 5, D.C.
Trans. Amer. Inst. Elect. Engrs	*Transactions of the American Institute of Electrical Engineers.* 33 West 39th Street, New York.
**Trans. Amer. Inst. Min. Metall. Engrs*	*Transactions of the American Institute of Mining and Metallurgical Engineers.* 29 West 39th Street, New York 18.
Trans Amer. Phil. Soc.	*Transactions of the American Philosophical Society.* Independence Square Philadelphia.
Trans. Amer. Soc. Mech. Engrs	*Transactions of the American Society of Mechanical Engineers.* 29 West 39th Street, New York.

**Trans. Bose Res. Inst. Calcutta*	*Transactions of the Bose Research Institute.* [Abstracted by *Photographic Abstracts.*]
**Trans. Brit. Ceram. Soc.*	*Transactions of the British Ceramic Society.* North Staffordshire Technical College, Victoria Road, Stoke-on-Trent, Staffordshire.
Trans. Chalmers Univ. Tech., Gothenburg	*Transactions of the Chalmers University of Technology.* Gothenburg.
Trans. Danish Acad. Tech. Sci.	*Transactions of the Danish Academy of Technical Sciences.* Øster Voldgade 10, Copenhagen.
Trans. Faraday Soc.	*Transactions of the Faraday Society.* Gurney & Jackson, 98 Great Russell Street, London, W.C.2; Tweeddale Court, Edinburgh.
Trans. Illum. Engng Soc., Lond.	*Transactions of the Illuminating Engineering Society.* 32 Victoria Street, London, S.W.1.
Trans. Inst. Mar. Engrs	*Transactions of the Institute of Marine Engineers.* 85 Minories, London, E.C.3.
**Trans. Inst. Min. Engrs*	*Transactions of the Institute of Mining Engineers.* Salisbury House, Finsbury Circus, London, E.C.2.
Trans. Instn Engrs Shipb. Scot.	*Transactions of the Institution of Engineers and Shipbuilders in Scotland.* Elmbank Crescent, Glasgow, C.2.
Trans. Instn Nav. Archit., Lond.	*Transactions of the Institution of Naval Architects.* 10 Upper Belgrave Street, London, S.W.1.
Trans. Instn Rubb. Ind.	*Transactions of the Institution of the Rubber Industry.* 12 Whitehall, London, S.W.1.
Trans. N.-E. Cst Instn Engrs Shipb.	*Transactions of the North-East Coast Institution of Engineers and Shipbuilders.* Bolbeck Hall, Newcastle upon Tyne.
Trans. N.Y. Acad. Sci.	*Transactions of the New York Academy of Science.* Central Park West at 79th Street, New York 24.
Trans. Roy. Inst. Techn., Stockholm	*Transactions of the Royal Institute of Technology.* Stockholm.
Trans. Roy. Soc. Can.	*Transactions of the Royal Society of Canada.* The National Research Council, Ottawa.
Trans. Roy. Soc. Edinb.	*Transactions of the Royal Society of Edinburgh.* 22–24 George Street, Edinburgh.
Trans. S. Afr. Inst. Elect. Engrs	*Transactions of the South African Institute of Electrical Engineers.* The Associated Scientific and Technical Societies of South Africa, Kelvin House, Marshall and Holland Streets. P.O. Box 5907, Johannesburg.
**Trav. Inst. Math. Stekloff*	*Travaux de l'Institut Mathématique Stekloff.* [Abstracted by *Mathematical Reviews.*]
**U.S. Atom. Energy Comm. Doc.*	*U.S. Atomic Energy Commission Documents.* Document Sales Agency, P.O. Box 62, Oak Ridge, Tennessee.
**Univ Wash. Publ. Math.*	*University of Washington Publications in Mathematics.* [Abstracted by *Mathematical Reviews.*]
Vestn. Elektroprom.	*Vestnik Elektropromyishlennosti.* Krasnaya Pl., Moscow.
**Vestn. Moskov. Univ.*	*Vestnik Moskovskogo Universiteta.* [Abstracted by *Mathematical Reviews.*]
Vide	*Le Vide.* Société Française des Ingénieurs Techniciens du Vide, 44 Rue de Rennes, Paris (VI^{e}).
Voordr. K. Inst. Ing.	*Voordrachten gehouden voor het Koninklijk Instituut van Ingenieurs.* 23 Princessegracht, The Hague.
Water Pwr	*Water Power.* 33 Tothill Street, London, S.W.1.
**Weld. J.*	*Welding Journal.* 33 West 39th Street, New York 18.
Westingho. Engr	*The Westinghouse Engineer.* 306 Fourth Avenue, Pittsburgh.
**Wire and W. Prod.*	*Wire and Wire Products.* 300 Main Street, Stamford, Connecticut.
Wireless Engr	*Wireless Engineer.* Dorset House, Stamford Street, London, S.E.1.
Wireless World	*Wireless World.* Dorset House, Stamford Street, London, S.E.1.
Wiss. Veröff. Siemens-Werk.	*Wissenschaftliche Veröffentlichungen aus den Siemens-Werken.* Berlin. [Pre-war issue.]
Yale Sci. Mag.	*Yale Scientific Magazine.* 244–A Yale Station, New Haven, Connecticut.
Z. angew. Math. Mech.	*Zeitschrift für angewandte Mathematik und Mechanik.* Akademie-Verlag, Chausseestr. 106, Berlin N.4.
Z. angew. Math. Phys.	*Zeitschrift für angewandte Mathematik und Physik.* Verlag Birkhäuser, Elisabethenstrasse 15, Basle.
Z. angew. Phys.	*Zeitschrift für angewandte Physik.* Springer-Verlag, Jebenstr. 1, Berlin-Charlottenburg 2.
Z. Astrophys.	*Zeitschrift für Astrophysik.* Springer-Verlag, Jebenstr. 1, Berlin-Charlottenburg 2.
Z. Elektrotech.	*Zeitschrift für Elektrotechnik.* Ferdinand Enke Verlag, Hasenbergsteige 3. Stuttgart.
Z. Naturforsch.	*Zeitschrift für Naturforschung.* Johannesweg 11, Tübingen.
Z. Öst. Ing. Arch. Ver.	*Zeitschrift des Österreichischen Ingenieur- und Architekten-Vereines.* Springer-Verlag, Mölkerbastei 5, Vienna I.
Z. Phys.	*Zeitschrift für Physik.* Springer-Verlag, Jebenstr. 1, Berlin-Charlottenburg 2.
Z. Ver. dtsch. Ing. [*VDI*]	*Zeitschrift des Vereines deutscher Ingenieure.* Deutscher Ingenieur-Verlag, Düsseldorf.
Z. wiss. Photogr.	*Zeitschrift für wissenschaftliche Photographie, Photophysik und Photochemie.* J. A. Barth, Salomonstrasse 18B, Leipzig C1.

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Index Aeronauticus	Ministry of Supply, Millbank, London, S.W.1.
Int. Inst. Refrigeration	Institut International du Froid, 9 Avenue Carnot, Paris (XVII[e]).
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